```
=> file registry
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STRUCTURE FILE UPDATES:   30 MAR 2009  HIGHEST RN 1129871-47-1
DICTIONARY FILE UPDATES:  30 MAR 2009  HIGHEST RN 1129871-47-1

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html
Uploading L9.str
```
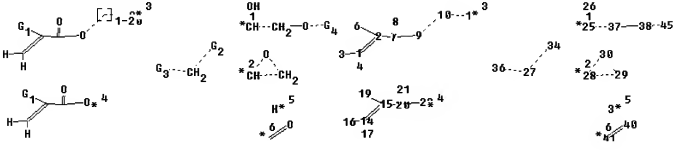



```
chain nodes :
1  2  3  4  6  7  8  14  15  16  17  19  20  21  25  26  27  34  36  37  38  39
40  41  45
ring nodes :
28  29  30
ring/chain nodes :
9  10  11  22
chain bonds :
1-2  1-3  1-4  2-6  2-7  7-8  7-9  14-15  14-16  14-17  15-19  15-20  20-21  20-22
25-26  25-37  27-34  27-36  37-38  38-45  40-41
ring/chain bonds :
9-10  10-11
ring bonds :
28-30  28-29  29-30
exact/norm bonds :
2-6  7-8  7-9  9-10  10-11  15-19  20-21  20-22  25-26  25-37  27-34  27-36  28-30
28-29  29-30  38-45  40-41
exact bonds :
1-2  1-3  1-4  2-7  14-15  14-16  14-17  15-20  37-38

G1:H,CH3
```

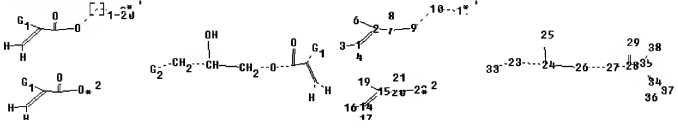
G2:[*1],[*2]

G3:[*3],[*4]

G4:[*5],[*6]

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 25:CLASS
26:CLASS 27:CLASS 28:Atom 29:Atom 30:Atom 34:CLASS 36:CLASS 37:CLASS
38:CLASS 39:CLASS
40:CLASS 41:CLASS 45:CLASS

Uploading L91.str



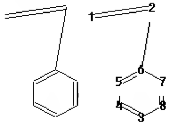
chain nodes :
1 2 3 4 6 7 8 14 15 16 17 19 20 21 22 23 24 25 26 27 28 29
33 34 35 36 37 38
ring/chain nodes :
9 10 11
chain bonds :
1-2 1-3 1-4 2-6 2-7 7-8 7-9 14-15 14-16 14-17 15-19 15-20 20-21 20-22
23-24 23-33 24-25 24-26 26-27 27-28 28-29 28-35 34-35 34-36 34-37 35-38
ring/chain bonds :
9-10 10-11
exact/norm bonds :
2-6 7-8 7-9 9-10 10-11 15-19 20-21 20-22 23-24 23-33 26-27 27-28 28-29
34-36 34-37 35-38
exact bonds :
1-2 1-3 1-4 2-7 14-15 14-16 14-17 15-20 24-25 24-26 28-35 34-35

G1:H,CH3

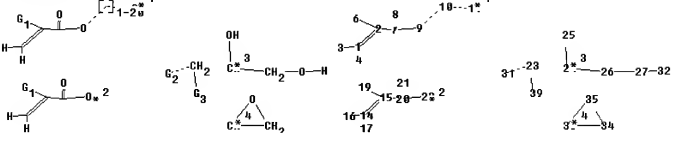
G2:[*1],[*2]

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 23:CLASS
24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 33:CLASS 34:CLASS
35:CLASS 36:CLASS
37:CLASS 38:CLASS

Uploading L92.str

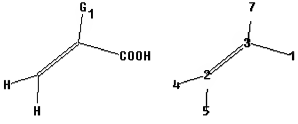


```
chain nodes :
1  2
ring nodes :
3  4  5  6  7  8
chain bonds :
1-2  2-6
ring bonds :
3-4  3-8  4-5  5-6  6-7  7-8
exact bonds :
1-2  2-6
normalized bonds :
3-4  3-8  4-5  5-6  6-7  7-8
isolated ring systems :
containing 3 :


Match level :
1:CLASS  2:CLASS  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom


Uploading L116.str
```



```
chain nodes :
1  2  3  4  6  7  8  14  15  16  17  19  20  21  22  23  24  25  26  27  31  32
39
ring nodes :
33  34  35
ring/chain nodes :
9  10  11
chain bonds :
1-2  1-3  1-4  2-6  2-7  7-8  7-9  14-15  14-16  14-17  15-19  15-20  20-21  20-22
23-31  23-39  24-26  24-25  26-27  27-32
ring/chain bonds :
9-10  10-11
ring bonds :
33-34  33-35  34-35
exact/norm bonds :
2-6  7-8  7-9  9-10  10-11  15-19  20-21  20-22  23-31  23-39  33-34  33-35  34-35
```

```
exact bonds :
1-2  1-3  1-4  2-7  14-15  14-16  14-17  15-20  24-26  24-25  26-27  27-32


G1:H,CH3

G2:[*1],[*2]

G3:[*3],[*4]

Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS  10:CLASS
11:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS  19:CLASS  20:CLASS  21:CLASS
22:CLASS  23:CLASS
24:CLASS  25:CLASS  26:CLASS  27:CLASS  31:CLASS  32:CLASS  33:Atom  34:Atom
35:Atom  39:CLASS



Uploading L117.str
```




```
chain nodes :
1  2  3  4  5  7
chain bonds :
1-3  2-3  2-4  2-5  3-7
exact/norm bonds :
3-7
exact bonds :
1-3  2-3  2-4  2-5


G1:CH3,H

Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  5:CLASS  7:CLASS



Uploading L128.str
 ——S 2——1


chain nodes :
1
ring/chain nodes :
2
chain bonds :
1-2
exact bonds :
1-2
```

```
Hydrogen count :
1:= exact 1
Connectivity :
1:1 E exact RC ring/chain
Match level :
1:CLASS  2:CLASS



=> file zcaplus
FILE 'ZCAPLUS' ENTERED AT 14:39:18 ON 01 APR 2009
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FILE COVERS 1907 - 1 Apr 2009  VOL 150 ISS 14
FILE LAST UPDATED: 31 Mar 2009  (20090331/ED)

ZCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

=> d stat que L176
L4          279 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  KAMIJO M?/AU
L5         1553 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ONISHI M?/AU
L6          174 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  MUROFUSHI K?/AU
L9              STR
```
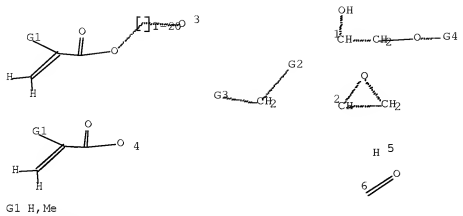
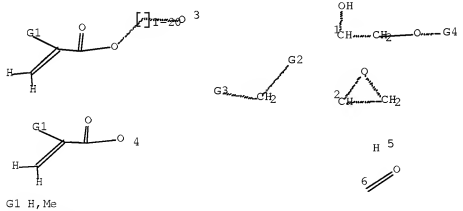



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

Structure attributes must be viewed using STN Express query preparation.
L11 26603 SEA FILE=REGISTRY SSS FUL L9
L176 16 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L11 AND (L4 OR L5 OR L6)

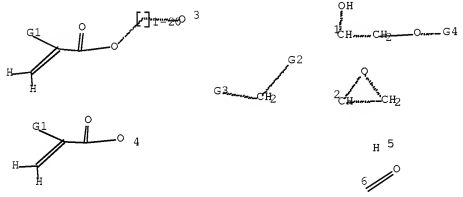
=> d stat que L177
L4 279 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON KAMIJO M?/AU
L5 1553 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ONISHI M?/AU
L6 174 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON MUROFUSHI K?/AU
L9 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

Structure attributes must be viewed using STN Express query preparation.
L11 26603 SEA FILE=REGISTRY SSS FUL L9

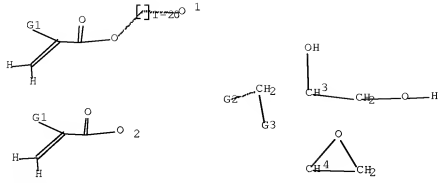
```
L153       24646 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  OPTICAL FILTER?/BI
L155       18399 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  COLOR FILTER?/BI
L176          16 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L11 AND (L4 OR L5 OR
                 L6)
L177           5 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L176 AND (L153 OR
                 L155)


=> d stat que L178
L4           279 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  KAMIJO M?/AU
L5          1553 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ONISHI M?/AU
L6           174 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  MUROFUSHI K?/AU
L9                STR
```



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

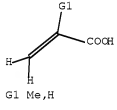
```
Structure attributes must be viewed using STN Express query preparation.
L11        26603 SEA FILE=REGISTRY SSS FUL L9
L92              STR
```

```
Structure attributes must be viewed using STN Express query preparation.
L116             STR
```



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]

Structure attributes must be viewed using STN Express query preparation.
L117 STR



G1 Me,H

Structure attributes must be viewed using STN Express query preparation.
L119 2895 SEA FILE=REGISTRY SUB=L11 SSS FUL L92 AND L116 AND L117
L128 STR

—S

Structure attributes must be viewed using STN Express query preparation.
L130 821 SEA FILE=REGISTRY SUB=L11 SSS FUL L128
L131 26 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L130 AND L119
L132 12 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L131
L133 651886 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?FILTER?/BI
L134 827768 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON COLOR?/BI
L135 2 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L132 AND L133
L176 16 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L11 AND (L4 OR L5 OR L6)
L178 5 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L176 AND (L134 OR L135)

=> s L176-L178

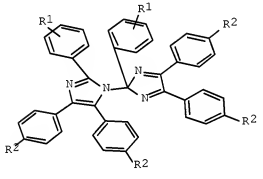
L179 16 (L176 OR L177 OR L178)

=> d ibib abs hitind hitstr L179 1-16

L179 ANSWER 1 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1466748 ZCAPLUS Full-text
DOCUMENT NUMBER: 148:89061
TITLE: Hexaarylbiimidazole compounds, their use as photoradical polymerization initiators, and photopolymerizable compositions containing them for color filters
INVENTOR(S): Miyata, Hideo; Ikeda, Haruhiko; Murofushi, Katsumi
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007332045	A	20071227	JP 2006-162872	20060612
PRIORITY APPLN. INFO.:			JP 2006-162872	20060612

OTHER SOURCE(S): MARPAT 148:89061
GI



I

AB Photopolymerizable compns. contain title compds. I [R1 = 2- or 4-cyano; R2 = (un)substituted C1-4 alkyl, H], radically-polymerizable compds., and optional ≥1 selected from benzophenones, thioxanthones, and ketocoumarins. I show good solubility and high sensitivity.

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

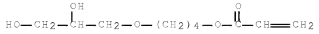
ST photopolymerizable compn hexaarylbiimidazole photoradical polymn initiator color filter

IT Epoxy resins, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylates, reaction products with tetrahydrophthalic anhydride; hexaarylbiimidazole compds. as photoradical polymerization initiators and photopolymerizable compns. containing them for color

filters)
IT Optical filters
Photoresists
(hexaarylbiimidazole compds. as photoradical polymerization initiators and photopolymerizable compns. containing them for color filters)
IT Polymerization catalysts
(photochem., radical; hexaarylbiimidazole compds. as photoradical polymerization initiators and photopolymerizable compns. containing them for
color filters)
IT 38696-60-5P
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(hexaarylbiimidazole compds. as photoradical polymerization initiators and photopolymerizable compns. containing them for color filters)
IT 960504-03-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(hexaarylbiimidazole compds. as photoradical polymerization initiators and photopolymerizable compns. containing them for color filters)
IT 488840-86-4P 852316-39-3DP, ester with glycidyl methacrylate and 4-hydroxybutyl acrylate glycidyl ether
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(hexaarylbiimidazole compds. as photoradical polymerization initiators and photopolymerizable compns. containing them for color filters)
IT 105-07-7, p-Cyanobenzaldehyde 3457-48-5, 4,4'-Dimethylbenzil
RL: RCT (Reactant); RACT (Reactant or reagent)
(hexaarylbiimidazole compds. as photoradical polymerization initiators and photopolymerizable compns. containing them for color filters)
IT 29570-58-9, DPHA 64401-02-1, BP4EA
RL: TEM (Technical or engineered material use); USES (Uses)
(hexaarylbiimidazole compds. as photoradical polymerization initiators and photopolymerizable compns. containing them for color filters)
IT 885620-55-3
RL: TEM (Technical or engineered material use); USES (Uses)
(hydrogen donor; hexaarylbiimidazole compds. as photoradical polymerization initiators and photopolymerizable compns. containing them for color filters)
IT 852316-39-3DP, ester with glycidyl methacrylate and 4-hydroxybutyl acrylate glycidyl ether
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(hexaarylbiimidazole compds. as photoradical polymerization initiators and photopolymerizable compns. containing them for color filters)
RN 852316-39-3 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-4-methylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)

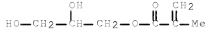
CM 1

CRN 251298-12-1
CMF C10 H18 O5



CM 2

CRN 5919-74-4
CMF C7 H12 O4

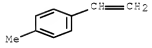


CM 3

CRN 42248-78-2
CMF (C9 H10 . C4 H6 O2)x
CCI PMS

CM 4

CRN 622-97-9
CMF C9 H10



CM 5

CRN 79-41-4
CMF C4 H6 O2

L179 ANSWER 2 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1454727 ZCAPLUS Full-text

DOCUMENT NUMBER: 148:55587
TITLE: Polymerization accelerators, curable compositions, cured products, and method for producing thiol compounds
INVENTOR(S): Miyata, Hideo; Ikeda, Haruhiko; Murofushi, Katsumi; Hattori, Yotaro; Urakawa, Katsuro
PATENT ASSIGNEE(S): Showa Denko K.K., Japan
SOURCE: PCT Int. Appl., 37pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007145241	A1	20071221	WO 2007-JP61885	20070613
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 2030989	A1	20090304	EP 2007-767111	20070613
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
KR 2009031559	A	20090326	KR 2009-700579	20090112
PRIORITY APPLN. INFO.:			JP 2006-163940 A	20060613
			WO 2007-JP61885 W	20070613

OTHER SOURCE(S): MARPAT 148:55587

AB Disclosed is a polymerization accelerator composed of a specific thiol compound Also disclosed are a curable composition excellent in thermal stability, which contains such a polymerization accelerator, and a cured product obtained from such a curable composition Specifically disclosed is a polymerization accelerator composed of a thiol compound having two or more groups represented by the following general formula -(CH2)mC(SH)(R1)(ph), wherein R1 = H, C1-10 alkyl and m = 0, an integer 1-2.

CC 35-8 (Chemistry of Synthetic High Polymers)
IT 960155-18-4P
RL: IMF (Industrial manufacture); PREP (Preparation)
(polymerization accelerators, curable compns., cured products, and method for producing thiol compds.)
IT 7328-39-4P, 3-Mercapto-3-phenylpropionic acid 161982-92-9P 960155-17-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(polymerization accelerators, curable compns., cured products, and method for producing thiol compds.)
IT 960155-18-4P
RL: IMF (Industrial manufacture); PREP (Preparation)
(polymerization accelerators, curable compns., cured products, and method

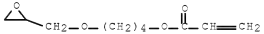
for
producing thiol compds.)

RN 960155-18-4 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-(chloromethyl)oxirane, 1-ethenyl-4-methylbenzene, 4,4'-(1-methylethylidene)bis[phenol], α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(1-oxo-2-propen-1-yl)oxy]poly(oxy-1,2-ethanediyl)], 4-(2-oxiranylmethoxy)butyl 2-propenoate, 2-oxiranylmethyl 2-methyl-2-propenoate, 1,1'-[2-[[3-[(1-oxo-2-propen-1-yl)oxy]-2,2-bis[[(1-oxo-2-propen-1-yl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propen-1-yl)oxy]methyl]-1,3-propanediyl] di-2-propenoate, 2-propenoic acid and 3a,4,7,7a-tetrahydro-1,3-isobenzofurandione (CA INDEX NAME)

CM 1

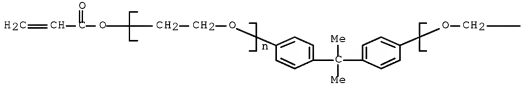
CRN 119692-59-0
CMF C10 H16 O4



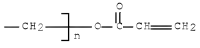
CM 2

CRN 64401-02-1
CMF (C2 H4 O)n (C2 H4 O)n C21 H20 O4
CCI PMS

PAGE 1-A

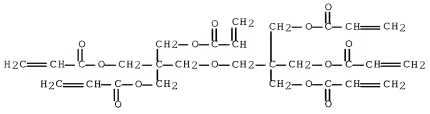


PAGE 1-B



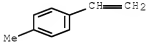
CM 3

CRN 29570-58-9
CMF C28 H34 O13



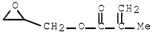
CM 4

CRN 622-97-9
CMF C9 H10



CM 5

CRN 106-91-2
CMF C7 H10 O3



CM 6

CRN 106-89-8
CMF C3 H5 Cl O

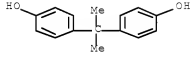
CM 7

CRN 85-43-8

CMF C8 H8 O3

CM 8

CRN 80-05-7
CMF C15 H16 O2

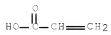


CM 9

CRN 79-41-4
CMF C4 H6 O2

CM 10

CRN 79-10-7
CMF C3 H4 O2

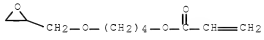


IT 960155-17-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(polymerization accelerators, curable compns., cured products, and method for
producing thiol compds.)

RN 960155-17-3 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-4-methylbenzene, 4-(2-oxiranylmethoxy)butyl 2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

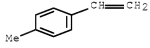
CM 1

CRN 119692-59-0
CMF C10 H16 O4



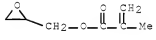
CM 2

CRN 622-97-9
CMF C9 H10



CM 3

CRN 106-91-2
CMF C7 H10 O3



CM 4

CRN 79-41-4
CMF C4 H6 O2

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L179 ANSWER 3 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:1242623 ZCAPLUS Full-text
DOCUMENT NUMBER: 143:485945
TITLE: Black resist composition for color filters in optical imaging devices
INVENTOR(S): Onishi, Mina; Kamijo, Masanao; Murofushi, Katsumi
PATENT ASSIGNEE(S): Showa Denko K.K., Japan
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005111674	A1	20051124	WO 2005-JP9109	20050512
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20050258406	A1	20051124	US 2005-128167	20050513
PRIORITY APPLN. INFO.:			JP 2004-143230 A	20040513
			US 2004-572947P P	20040521

AB Disclosed is a black resist composition for color filters which contains titanium black (A) having an average primary particle size of not more than 100 nm, carbon black (B) having an average primary particle size of not more than 60 nm, an acrylic copolymer dispersing agent (C) having an amino group and/or a quaternary ammonium salt, an organic solvent (D) and a binder resin (E) having a carboxyl group and an ethylenically unsatd. group. In this black resist composition, the mass ratio between the titanium black as the component (A) and the carbon black as the component (B) is 100:5-1000. With such a black resist composition for color filters, a pattern can be easily formed by a photolithog. process, and can be made thin with sufficient sensitivity and resolution while exhibiting excellent light-blocking properties and insulating properties.

IC ICM G02B005-20
ICS C09D011-02; G03F007-004; G03F007-027

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST black resist compn color filter optical imaging device

IT Optical filters
Optical imaging devices
(black resist composition for color filter in optical imaging devices)

IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(black resist composition for color filter in optical imaging devices)

IT Photoimaging materials
(photopolymerizable; black resist composition for color filter in optical imaging devices)

IT 33434-24-1P, Ethyl acrylate-methyl methacrylate- Light Ester DQ 100 copolymer 852316-40-6P, Methacrylic acid-4-methylstyrene copolymer ester with glycidyl methacrylate 869729-87-3P, Light Ester PO-methyl methacrylate-Light Ester DQ 100-Light Ester DM copolymer 869747-80-8P, Methacrylic acid-methyl methacrylate-benzyl methacrylate-2-hydroxyethyl methacrylate copolymer ester with glycidyl methacrylate
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(black resist composition for color filter in optical imaging devices)

IT 99638-92-3, Titan black
RL: TEM (Technical or engineered material use); USES (Uses)
(black resist composition for color filter in optical imaging devices)

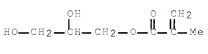
IT 852316-40-6P, Methacrylic acid-4-methylstyrene copolymer ester with glycidyl methacrylate 869747-80-8P, Methacrylic acid-methyl methacrylate-benzyl methacrylate-2-hydroxyethyl methacrylate copolymer ester with glycidyl methacrylate
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(black resist composition for color filter in optical imaging devices)

RN 852316-40-6 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-4-methylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

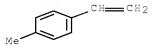


CM 2

CRN 42248-78-2
CMF (C9 H10 . C4 H6 O2)x
CCI PMS

CM 3

CRN 622-97-9
CMF C9 H10



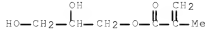
CM 4

CRN 79-41-4
CMF C4 H6 O2

RN 869747-80-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

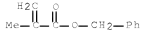


CM 2

CRN 191545-17-2
CMF (C11 H12 O2 . C6 H10 O3 . C5 H8 O2 . C4 H6 O2)x
CCI PMS

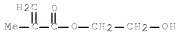
CM 3

CRN 2495-37-6
CMF C11 H12 O2



CM 4

CRN 868-77-9
CMF C6 H10 O3



CM 5

CRN 80-62-6
CMF C5 H8 O2

CM 6

CRN 79-41-4
CMF C4 H6 O2

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L179 ANSWER 4 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:451432 ZCAPLUS Full-text
DOCUMENT NUMBER: 143:8522
TITLE: Curable polymer compound containing methacrylate ester groups
INVENTOR(S): Kamijo, Masanao; Onishi, Mina; Murofushi, Katsumi
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005047346	A1	20050526	WO 2004-JP16505	20041101

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG

EP 1682589 A1 20060726 EP 2004-799528 20041101
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS
CN 1878798 A 20061213 CN 2004-80033362 20041101
JP 2005163033 A 20050623 JP 2004-328725 20041112
US 20070083012 A1 20070412 US 2006-579066 20060511
KR 2006090717 A 20060814 KR 2006-709299 20060512
PRIORITY APPLN. INFO.: JP 2003-382759 A 20031112
US 2003-523309P P 20031120
WO 2004-JP16505 W 20041101

AB There are provided a novel curable polymer compound of the present invention comprises having a structure represented: CH2=C(R1)COO(R2O)nCH2CH(OH)CH2OOC- wherein R1 represents a hydrogen atom or a Me group, R2 independently has one or more organic residues selected from the group consisting of an alkylene group, a branched alkylene group, an alkenylene group, a branched alkenylene group, a cycloalkylene group, a cycloalkenylene group and an arylene group, and n represents an integer of 0 to 1, a method of preparing the polymer compound, a radical polymerizable and curable composition using the polymer compound, and a cured product obtained by photo-curing the radical polymerizable and curable composition A curable resin was prepared by reaction of glycidyl methacrylate and 4-hydroxybutylacrylate glycidyl ether with methacrylic acid-p-methylstyrene copolymer.

IC ICM C08F008-14
ICS C08F020-18; G03F007-00

CC 37-3 (Plastics Manufacture and Processing)

IT Optical filters
(curable polymer compound containing methacrylate ester groups)

IT 25086-15-1P, Methacrylic acid-methyl methacrylate copolymer 42248-78-2P, Methacrylic acid-p-methylstyrene copolymer 852316-39-3P 852316-40-6P 852316-41-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(curable polymer compound containing methacrylate ester groups)

IT 852316-42-8P 852316-43-9P 852316-44-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(curable polymer compound containing methacrylate ester groups)

IT 852316-39-3P 852316-40-6P 852316-41-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(curable polymer compound containing methacrylate ester groups)

RN 852316-39-3 ZCAPLUS

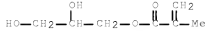
CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-4-methylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 251298-12-1
CMF C10 H18 O5

CM 2

CRN 5919-74-4
CMF C7 H12 O4

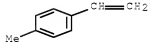


CM 3

CRN 42248-78-2
CMF (C9 H10 . C4 H6 O2)x
CCI PMS

CM 4

CRN 622-97-9
CMF C9 H10



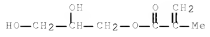
CM 5

CRN 79-41-4
CMF C4 H6 O2

RN 852316-40-6 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-4-methylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

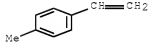


CM 2

CRN 42248-78-2
CMF (C9 H10 . C4 H6 O2)x
CCI PMS

CM 3

CRN 622-97-9
CMF C9 H10



CM 4

CRN 79-41-4
CMF C4 H6 O2

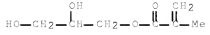
RN 852316-41-7 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 251298-12-1
CMF C10 H18 O5

CM 2

CRN 5919-74-4
CMF C7 H12 O4



CM 3

CRN 25086-15-1
CMF (C5 H8 O2 . C4 H6 O2)x
CCI PMS

CM 4

CRN 80-62-6
CMF C5 H8 O2

CM 5

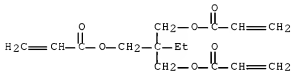
CRN 79-41-4
CMF C4 H6 O2

IT 852316-42-8P 852316-43-9P 852316-44-0P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(curable polymer compound containing methacrylate ester groups)
RN 852316-42-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-4-methylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester, polymer with

2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 15625-89-5
CMF C15 H20 O6



CM 2

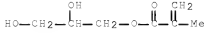
CRN 852316-39-3
CMF C10 H18 O5 . x (C9 H10 . C4 H6 O2)x . x C7 H12 O4

CM 3

CRN 251298-12-1
CMF C10 H18 O5

CM 4

CRN 5919-74-4
CMF C7 H12 O4



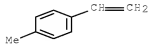
CM 5

CRN 42248-78-2
CMF (C9 H10 . C4 H6 O2)x
CCI PMS

CM 6

CRN 622-97-9

CMF C9 H10



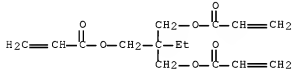
CM 7

CRN 79-41-4
CMF C4 H6 O2

RN 852316-43-9 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-4-methylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 15625-89-5
CMF C15 H20 O6

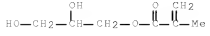


CM 2

CRN 852316-40-6
CMF (C9 H10 . C4 H6 O2)x . x C7 H12 O4

CM 3

CRN 5919-74-4
CMF C7 H12 O4

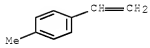


CM 4

CRN 42248-78-2
CMF (C9 H10 . C4 H6 O2)x
CCI PMS

CM 5

CRN 622-97-9
CMF C9 H10



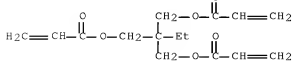
CM 6

CRN 79-41-4
CMF C4 H6 O2

RN 852316-44-0 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl 2-hydroxy-3-[4-[(1-oxo-2-propenyl)oxy]butoxy]propyl ester, polymer with 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 15625-89-5
CMF C15 H20 O6



CM 2

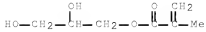
CRN 852316-41-7
CMF C10 H18 O5 . x C7 H12 O4 . x (C5 H8 O2 . C4 H6 O2)x

CM 3

CRN 251298-12-1
CMF C10 H18 O5

CM 4

CRN 5919-74-4
CMF C7 H12 O4



CM 5

CRN 25086-15-1
CMF (C5 H8 O2 . C4 H6 O2)x
CCI PMS

CM 6

CRN 80-62-6
CMF C5 H8 O2

CM 7

CRN 79-41-4
CMF C4 H6 O2

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L179 ANSWER 5 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:534427 ZCAPLUS Full-text
DOCUMENT NUMBER: 141:96795
TITLE: Color filter black matrix resist composition and carbon black dispersion composition used for the composition
INVENTOR(S): Kamata, Hirotoshi; Kamijo, Masanao; Onishi, Mina
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004055597	A1	20040701	WO 2003-JP16174	20031217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004198717	A	20040715	JP 2002-366878	20021218
AU 2003294175	A1	20040709	AU 2003-294175	20031217
EP 1576418	A1	20050921	EP 2003-789601	20031217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1729429	A	20060201	CN 2003-80106777	20031217
US 20060041053	A1	20060223	US 2005-539283	20050616

PRIORITY APPLN. INFO.:			
JP 2002-366878	A	20021218	
US 2002-435997P	P	20021226	
WO 2003-JP16174	W	20031217	

AB The present invention provides a carbon black dispersion composition for a color filter black matrix resist composition, containing (A) a carbon black having specified phys. properties (average primary particle diameter, concentration of surface carboxyl groups), (B) a copolymer having an amino group and/or its quaternary ammonium salt, and (C) an organic solvent, and a color filter black matrix resist composition that contains the above-mentioned dispersion composition, (D) a binder resin having a carboxyl group, (E) an ethylenically unsatd. monomer, (F) a photopolymn. initiator, and (G) specified multifunctional thiol compound and can easily form a thin film or pattern having high light-shielding property by photolithog. method pattern, has excellent storage stability, and exhibits sufficient sensitivity and resolution

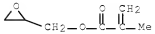
IC ICM G03F007-00
ICS G03F001-1335

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38
ST color filter black matrix resist compn carbon dispersion
IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(Special Black 250; color filter black matrix resist composition and carbon black dispersion composition containing)
IT Optical filters
Photolithography
(color filter black matrix resist composition and carbon black dispersion composition)
IT Cameras
Liquid crystal displays
(color filter black matrix resist composition and carbon black dispersion composition for)
IT 132011-04-2
RL: TEM (Technical or engineered material use); USES (Uses)
(binder; color filter black matrix resist composition and carbon black dispersion composition containing)
IT 30400-35-2P, Butyl Methacrylate-glycidyl methacrylate-methacrylic acid-methyl methacrylate copolymer 714956-12-4P, Benzyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-2-(methacryloyloxy)ethyl isocyanate copolymer 714956-13-5P, Macromonomer AA 6-Light Ester DQ 100-Light Ester DM-NK Ester M 20G copolymer 714959-43-0P, Macromonomer AA 6-ethyl acrylate-Light Ester DQ 100-Light Ester DM copolymer 714959-44-1P, Macromonomer AA 6-Light Ester DQ 100-Light Ester DM-Light Ester PO copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(color filter black matrix resist composition and carbon black dispersion composition containing)
IT 590678-22-1P 645402-18-2P
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(photopolymn. initiator; color filter black matrix resist composition and carbon black dispersion composition containing)
IT 77-99-6, Trimethylolpropane 89-98-5, o-Chlorobenzaldehyde 3457-48-5, 4,4'-Dimethylbenzil 54051-19-3, 3-Mercaptobutanoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of photopolymn. initiator for color filter black matrix resist composition)
IT 645402-19-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of photopolymn. initiator for color filter black matrix resist composition)
IT 108-94-1, Cyclohexanone, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(solvent; color filter black matrix resist composition and carbon black dispersion composition containing)
IT 30400-35-2P, Butyl Methacrylate-glycidyl methacrylate-methacrylic acid-methyl methacrylate copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(color filter black matrix resist composition and carbon black dispersion composition containing)
RN 30400-35-2 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

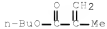
CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 97-88-1
CMF C8 H14 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L179 ANSWER 6 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:534426 ZCAPLUS Full-text
DOCUMENT NUMBER: 141:96711
TITLE: Color filter black matrix resist composition

INVENTOR(S): Kamata, Hirotoshi; Kamijo, Masanao; Onishi, Mina
PATENT ASSIGNEE(S): Showa Denko K. K., Japan
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004055596	A1	20040701	WO 2003-JP16017	20031215
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004198542	A	20040715	JP 2002-364274	20021216
AU 2003288748	A1	20040709	AU 2003-288748	20031215
EP 1573397	A1	20050914	EP 2003-780754	20031215
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1726434	A	20060125	CN 2003-80106299	20031215
US 20060036023	A1	20060216	US 2005-539037	20050615

PRIORITY APPLN. INFO.: JP 2002-364274 A 20021216
US 2002-435284P P 20021223
WO 2003-JP16017 W 20031215

OTHER SOURCE(S): MARPAT 141:96711

AB The present invention relates to (1) a photosensitive composition for color filter black matrix resists, containing (A) a binder resin having a carboxyl group, (B) a compound having an ethylenically unsatd. bond, (C) a photopolymg. initiator, (D) a thiol compound having two or more mercapto-group-containing groups in which carbon atoms at the a-position and/or n-position with respect to the mercapto group have a substituent, and (E) an organic solvent, and having high sensitivity and excellent storage stability; and (2) color filter black black matrix resist containing (1) the photosensitive composition for color filter black matrix resists and a black pigment (F).

IC ICM G03F007-00
ICS G02F001-1335
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
ST printing plate color filter black matrix resist compn
IT Carbon black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(Raven 1080; color filter black matrix resist composition containing)
IT Light-sensitive materials
Optical filters
Resists
(color filter black matrix resist composition)
IT Printing plates
(color filter black matrix resist composition for)
IT Polymerization
(photopolymn.; color filter black matrix resist

composition)

IT 30400-35-2P, Butyl methacrylate-glycidyl methacrylate-methacrylic acid-methyl methacrylate copolymer 714956-12-4P, Benzyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-2-(methacryloyloxy)ethyl isocyanate copolymer 714956-13-5P, Macromonomer AA 6-NK Ester M 20G-Light Ester DQ 100-Light Ester DM copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(color filter black matrix resist composition containing)

IT 149-30-4, 2-Mercaptobenzothiazole 33007-83-9, Trimethylolpropane tris(3-mercaptopropionate)
RL: TEM (Technical or engineered material use); USES (Uses)
(color filter black matrix resist composition containing)

IT 590678-00-5P 590678-06-1P 590678-22-1P 645402-18-2P
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(photopolymg. initiator; color filter black matrix resist composition containing)

IT 57-55-6, 1,2-Propylene glycol, reactions 77-99-6, Trimethylolpropane 89-98-5, o-Chlorobenzaldehyde 3457-48-5, 4,4'-Dimethylbenzil 4695-31-2, 2-Mercaptoisobutanoic acid 54051-19-3, 3-Mercaptobutanoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of photopolymg. initiator for color filter black matrix resist composition)

IT 645402-19-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of photopolymg. initiator for color filter black matrix resist composition)

IT 108-94-1, Cyclohexanone, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(solvent; color filter black matrix resist composition containing)

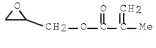
IT 30400-35-2P, Butyl methacrylate-glycidyl methacrylate-methacrylic acid-methyl methacrylate copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(color filter black matrix resist composition containing)

RN 30400-35-2 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

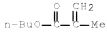
CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 97-88-1
CMF C8 H14 O2



CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L179 ANSWER 7 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:768004 ZCAPLUS Full-text
DOCUMENT NUMBER: 133:342582
TITLE: Photosensitive paste compositions containing cationic colorants as initiators and organic boron compounds and their plasma display panels with patterns of the compositions
INVENTOR(S): Yamashita, Chikako; Akagawa, Mayumi; Onodera, Seiya; Murofushi, Katsuki; Yamada, Morihiko
PATENT ASSIGNEE(S): Taiyo Ink Seizo K. K., Japan; Showa Denko K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2000305265 A 20001102 JP 1999-112265 19990420
PRIORITY APPLN. INFO.: JP 1999-112265 19990420
OTHER SOURCE(S): MARPAT 133:342582

AB The photosensitive past compns. contain inorg. fine particles, organic components containing photopolymerizable compds., cationic dyes shown as D+ A- (D+ = cation having absorption from visible to near IR; A- = anion), and organic B compds. shown as R1R2R3R4B- Z+ (R1-R4 = alkyl, aryl, aralkyl, alkenyl, silyl, heterocyclic, alicyclic, halo; Z+ = cation). The compns. have excellent photocurability and developability and offer patterns with high aspect ratio and high precision. The panels have ≥1 fired patterns selected from barrier rib patterns of plasma display panels, dielec. patterns, electrode patterns, and black matrix patterns.

IC ICM G03F007-029
ICS C08F002-50; G03F007-004; G03F007-40; H01B001-22; H01J011-02

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Quaternary ammonium compounds, uses
RL: CAT (Catalyst use); USES (Uses)
(decomposition of cationic colorants with; photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

IT Aluminoborosilicate glasses
RL: DEV (Device component use); USES (Uses)
(lead aluminoborosilicate, filler; photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

IT Plasma display panels
(patterns of barrier ribs, dielecs., conductors, and black matrixes; photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

IT 120307-06-4 219125-19-6
RL: CAT (Catalyst use); USES (Uses)
(decomposition of cationic colorants with; photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

IT 1344-28-1, Alumina, uses 13463-67-7, Titania, uses
RL: DEV (Device component use); USES (Uses)
(filler; photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

IT 3524-68-3P, Pentaerythritol triacrylate 28630-43-5P, Glycidyl methacrylate-methacrylic acid-methyl methacrylate copolymer
RL: DEV (Device component use); PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(past components; photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

IT 2358-84-1, Diethylene glycol dimethacrylate 263355-85-7, Ruler M 101
RL: DEV (Device component use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(past components; photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

IT 96233-24-8 141563-94-2
RL: CAT (Catalyst use); USES (Uses)
(photopolymn. initiators; photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

IT 303172-93-2P 303172-94-3P
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

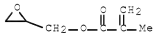
IT 28630-43-5P, Glycidyl methacrylate-methacrylic acid-methyl methacrylate copolymer
RL: DEV (Device component use); PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(past components; photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

RN 28630-43-5 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 80-62-6
CMF C5 H8 O2

CM 3

CRN 79-41-4
CMF C4 H6 O2

IT 303172-94-3P
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(photosensitive paste compns. containing cationic colorants and organic B compds. and their patterns for plasma display panels)

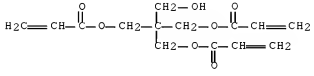
RN 303172-94-3 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with

1,1'-[2-(hydroxymethyl)-2-[[(1-oxo-2-propen-1-yl)oxy]methyl]-1,3-propanediyl] di-2-propenoate, methyl 2-methyl-2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

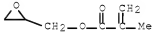
CM 1

CRN 3524-68-3
CMF C14 H18 O7



CM 2

CRN 106-91-2
CMF C7 H10 O3



CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

L179 ANSWER 8 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:629773 ZCAPLUS Full-text
DOCUMENT NUMBER: 131:262666
TITLE: Blood purification materials having free amino groups and anticoagulant substances
INVENTOR(S): Motomura, Tadahiro; Onishi, Masato
PATENT ASSIGNEE(S): Terumo Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11267421	A	19991005	JP 1998-72329	19980320

PRIORITY APPLN. INFO.: JP 1998-72329 19980320

AB The materials, which remove at least a part of pathogens such as virus, virus components, infected cells, endogenous substances, etc., from blood, have free amino groups, and anticoagulant substances on the substrate. The materials may be porous membranes with average pore size 0.1-10 μm, 25-300 μm-diameter porous beads, or nonwoven fabrics with average fiber diameter ≤100 μm on which polyamines are immobilized. A polypropylene porous membrane (average pore size 0.45 μm) was irradiated with Ar plasma, treated with 2-methoxyethyl acrylate gas and glycidyl methacrylate gas for graft polymerization, soaked in an aqueous solution containing poly(ethylenimine) and pyridine, heated at 90° for 10 min, and then soaked in a heparinized saline to give poly(ethylenimine)-immobilized porous membrane. A HIV-pos. blood plasma sample was filtered with the membrane to become HIV-neg.

IC ICM B01D039-14
ICS A61M001-36; B01D015-00
CC 63-7 (Pharmaceuticals)
IT 245081-05-4P
RL: DEV (Device component use); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(manufacture of blood purification materials having free amino groups and anticoagulant substances on the substrates)
IT 245081-05-4P
RL: DEV (Device component use); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(manufacture of blood purification materials having free amino groups and anticoagulant substances on the substrates)
RN 245081-05-4 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with aziridine, 2-methoxyethyl 2-propenoate and methyloxirane, graft (9CI) (CA INDEX NAME)

CM 1

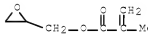
CRN 3121-61-7
CMF C6 H10 O3

CM 2

CRN 151-56-4
CMF C2 H5 N

CM 3

CRN 106-91-2
CMF C7 H10 O3



CM 4

CRN 75-56-9
CMF C3 H6 O

L179 ANSWER 9 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:417725 ZCAPLUS Full-text
DOCUMENT NUMBER: 129:96614
ORIGINAL REFERENCE NO.: 129:19913a,19916a
TITLE: Effect of surface structure on lubrication in water of hydrophilic/hydrophobic block copolymer coating membranes
AUTHOR(S): Aoike, Taku; Shimura, Kenichi; Onishi, Makoto; Hironaka, Seiichiro
CORPORATE SOURCE: Research Development Center, Terumo Corp., Kanagawa,

259-0151, Japan
SOURCE: Sekiyu Gakkaishi (1998), 41(4), 278-284
CODEN: SKGSAE; ISSN: 0582-4664
PUBLISHER: Sekiyu Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Hydrophilic/hydrophobic block copolymer [poly(N,N-dimethylacrylamide)-block-poly(glycidyl methacrylate) (PDMAA-b-PGMA)] was coated on the surface of polyurethane substrate by solvent-casting method, and then it was dried and annealed at 80°-140°. Before the sample was immersed in water, hydrophobic PGMA segment increased on the surface, and the segment increased with increasing drying temperature When the samples dried at low temps. (80°, 100°) were immersed in water, the composition of their coating membranes changed from PGMA segment-rich to PDMAA segment-rich, and the friction coefficient in water was about 0.03-0.04. The friction coefficient in water increased as drying temperature increased. Such behaviors were caused by the change in the surface structure, when immersed in water depending on the degree of PGMA segment enrichment. It became obvious that, when immersed in water, the change and the stability of surface structure of the hydrophilic/hydrophobic block copolymer coating membrane greatly influenced the lubricity of the coating membrane.

CC 42-4 (Coatings, Inks, and Related Products)
Section cross-reference(s): 63

IT 170111-14-5P, N,N-Dimethylacrylamide-glycidyl methacrylate block copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(effect of surface structure on lubrication of hydrophilic/hydrophobic dimethylacrylamide-glycidyl methacrylate block copolymer coating membranes in water)

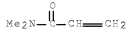
IT 170111-14-5P, N,N-Dimethylacrylamide-glycidyl methacrylate block copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(effect of surface structure on lubrication of hydrophilic/hydrophobic dimethylacrylamide-glycidyl methacrylate block copolymer coating membranes in water)

RN 170111-14-5 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with N,N-dimethyl-2-propenamide, block (CA INDEX NAME)

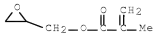
CM 1

CRN 2680-03-7
CMF C5 H9 N O



CM 2

CRN 106-91-2
CMF C7 H10 O3



L179 ANSWER 10 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:449935 ZCAPLUS Full-text
DOCUMENT NUMBER: 127:70874
ORIGINAL REFERENCE NO.: 127:13447a,13450a
TITLE: Antithrombotic materials for medical use
INVENTOR(S): Onishi, Makoto; Motomura, Tadahiro
PATENT ASSIGNEE(S): Terumo Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09131396	A	19970520	JP 1995-288509	19951107
JP 3818684	B2	20060906		
PRIORITY APPLN. INFO.:			JP 1995-288509	19951107

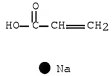
AB Antithrombotic materials for medical use are prepared by surface coating of base materials with antithrombotic substances containing proton donor groups and sulfuric acid groups in the mols. (coating via compds. containing functional groups reactive with proton donor groups). The materials were compatible with blood, body fluids and tissues.

IC ICM A61L033-00
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 38
IT 101-68-8DP, reaction products with sulfated polyallylamine or sulfated polyethyleneimine 3121-61-7DP, Methoxyethyl acrylate, reaction products with acryloyloxyethyl isocyanate and sulfated polyallylamine 9002-98-6DP, sulfated, reaction products with diphenylmethane diisocyanate 13641-96-8DP, reaction products with MEA and sulfated polyallylamine 21706-75-2DP, reaction products with sulfated polyvinylamine or sulfated polyallylamine 26336-38-9DP, Polyvinylamine, reaction products with sulfated polyvinylamine or sulfated polyallylamine 26914-43-2DP, Styrenesulfonic acid, reaction products with sulfated polyvinylamine or sulfated polyallylamine 30551-89-4DP, Polyallylamine, sulfated, reaction products with acryloyloxyethyl isocyanate and MEA 39121-78-3DP, reaction products with sulfated polyvinylamine or sulfated polyallylamine 40074-09-7DP, Sulfoethyl acrylate, reaction products with sulfated polyvinylamine or sulfated polyallylamine 191339-76-1P 191339-77-2P 191339-78-3P 191339-79-4P 191339-80-7P 191339-81-8P 191339-82-9P 191339-83-0P 191339-84-1P 191339-85-2P 191339-86-3P 191339-87-4P
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antithrombotic materials for medical use)
IT 191339-76-1P 191339-77-2P 191339-78-3P 191339-79-4P
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antithrombotic materials for medical use)

RN 191339-76-1 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with 2-methoxyethyl 2-propenoate, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt and sodium 2-propenoate (9CI) (CA INDEX NAME)

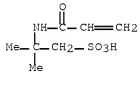
CM 1

CRN 7446-81-3
CMF C3 H4 O2 . Na



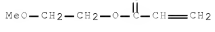
CM 2

CRN 5165-97-9
CMF C7 H13 N O4 S . Na



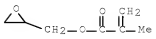
CM 3

CRN 3121-61-7
CMF C6 H10 O3



CM 4

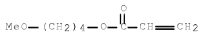
CRN 106-91-2
CMF C7 H10 O3



RN 191339-77-2 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer 4-methoxybutyl 2-propenoate, sodium ethenyl sulfate and sodium 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

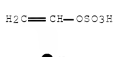
CM 1

CRN 44993-97-7
CMF C8 H14 O3



CM 2

CRN 5736-22-1
CMF C2 H4 O4 S . Na

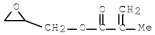


CM 3

CRN 5536-61-8
CMF C4 H6 O2 . Na

CM 4

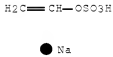
CRN 106-91-2
CMF C7 H10 O3



RN 191339-78-3 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with oxiranylmethyl 2-methyl-2-propenoate, sodium ethenyl sulfate and sodium 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5736-22-1
CMF C2 H4 O4 S . Na

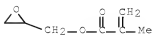


CM 2

CRN 5536-61-8
CMF C4 H6 O2 . Na

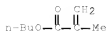
CM 3

CRN 106-91-2
CMF C7 H10 O3



CM 4

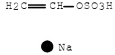
CRN 97-88-1
CMF C8 H14 O2



RN 191339-79-4 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with ethenylbenzene, sodium ethenyl sulfate and sodium 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5736-22-1
CMF C2 H4 O4 S . Na

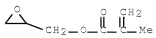


CM 2

CRN 5536-61-8
CMF C4 H6 O2 . Na

CM 3

CRN 106-91-2
CMF C7 H10 O3



CM 4

CRN 100-42-5
CMF C8 H8

L179 ANSWER 11 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:254378 ZCAPLUS Full-text
DOCUMENT NUMBER: 124:299010
ORIGINAL REFERENCE NO.: 124:55226h,55227a
TITLE: Antithrombogenic medical device having outstanding surface lubricity
INVENTOR(S): Onishi, Makoto; Shimura, Kenichi; Ishii, Naoki
PATENT ASSIGNEE(S): Terumo Kabushiki Kaisha, Japan; Terumo Corp.
SOURCE: Can. Pat. Appl., 73 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2153466	A1	19960108	CA 1995-2153466	19950707
CA 2153466	C	20010327		
JP 08019598	A	19960123	JP 1994-155860	19940707
JP 3462903	B2	20031105		
JP 08019599	A	19960123	JP 1994-157715	19940708
JP 08024327	A	19960130	JP 1994-164254	19940715
JP 3522839	B2	20040426		
JP 08024328	A	19960130	JP 1994-165508	19940718
JP 3599784	B2	20041208		
JP 08033704	A	19960206	JP 1994-170529	19940722
JP 3631781	B2	20050323		
US 5670558	A	19970923	US 1995-498796	19950706
EP 693293	A1	19960124	EP 1995-401651	19950707
EP 693293	B1	20030326		
R: BE, DE, FR, GB, IT, NL, SE				
JP 2004305768	A	20041104	JP 2004-213794	20040722

PRIORITY APPLN. INFO.:

JP 1994-155860	A	19940707
JP 1994-157715	A	19940708
JP 1994-164254	A	19940715
JP 1994-165508	A	19940718
JP 1994-170529	A	19940722

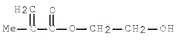
AB A medical instrument having on a surface lubricating layer that forms a hydrogel when wetted and that is composed of an insolubilized water-soluble or

water-swellable polymer having a reactive functional group in the mol. is claimed. The surface having outstanding surface lubricity and, optionally, the ability to prevent the formation of thrombi. A 10% solution of polyurethane in DMF containing 1% Et p-(6-guanidinohexanoyl)benzoate methanesulfonate was applied to a polyurethane catheter followed by coating of a 2% solution of dimethylacrylamide-glycidyl methacrylate block copolymer in acetone. The catheter had a slimy low-friction surface and the lubricity of the surface was not lost even when it was rubbed vigorously by 20 time of pressure application with a fingertip. The catheter was then immersed in a solution of low mol.weight heparin (500 units/mL) for 5 min., then freeze-dried. The heparinized catheter was immerse in a fresh sample of human blood for 5 min. and no thrombus was found to adhere to the surface of the catheter.

IC ICM A61L029-00
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 35, 38
IT 28472-86-8P, Glycidyl methacrylate-hydroxyethylmethacrylate copolymer 87500-53-6P 109550-18-7P 175796-01-7P 175796-02-8P 175796-03-9P
RL: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antithrombogenic medical device having outstanding surface lubricity)
IT 175796-00-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reaction product with Pellethane 65D; antithrombogenic medical device having outstanding surface lubricity)
IT 28472-86-8P, Glycidyl methacrylate-hydroxyethylmethacrylate copolymer 87500-53-6P 109550-18-7P 175796-01-7P 175796-02-8P
RL: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antithrombogenic medical device having outstanding surface lubricity)
RN 28472-86-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

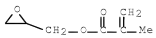
CM 1

CRN 868-77-9
CMF C6 H10 O3



CM 2

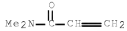
CRN 106-91-2
CMF C7 H10 O3



RN 87500-53-6 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with N,N-dimethyl-2-propenamide (CA INDEX NAME)

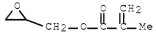
CM 1

CRN 2680-03-7
CMF C5 H9 N O



CM 2

CRN 106-91-2
CMF C7 H10 O3



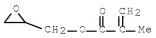
RN 109550-18-7 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethene, 2,5-furandione and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 108-31-6
CMF C4 H2 O3

CM 2

CRN 106-91-2
CMF C7 H10 O3



CM 3

CRN 80-62-6
CMF C5 H8 O2

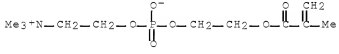
CM 4

CRN 74-85-1
CMF C2 H4

RN 175796-01-7 ZCAPLUS
CN 3,5,8-Trioxa-4-phosphaundec-10-en-1-aminium, 4-hydroxy-N,N,N,10-tetramethyl-9-oxo-, inner salt, 4-oxide, polymer with N,N-dimethyl-2-propenamide, 2-methyl-2-propenoic acid and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

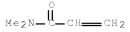
CM 1

CRN 67881-98-5
CMF C11 H22 N O6 P



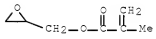
CM 2

CRN 2680-03-7
CMF C5 H9 N O



CM 3

CRN 106-91-2
CMF C7 H10 O3



CM 4

CRN 79-41-4
CMF C4 H6 O2

RN 175796-02-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with aziridine and N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

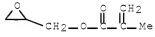
CRN 2680-03-7
CMF C5 H9 N O

CM 2

CRN 151-56-4
CMF C2 H5 N

CM 3

CRN 106-91-2
CMF C7 H10 O3



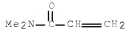
IT 175796-00-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reaction product with Pellethane 65D; antithrombogenic medical device having outstanding surface lubricity)
RN 175796-00-6 ZCAPLUS
CN Hexanedioic acid, polymer with N,N-dimethyl-2-propenamide, 2,2'-[1,2-ethanediylbis(oxy)]bis[ethanol], hydrogen peroxide (H2O2) and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7722-84-1
CMF H2 O2

CM 2

CRN 2680-03-7
CMF C5 H9 N O



CM 3

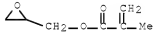
CRN 124-04-9
CMF C6 H10 O4

CM 4

CRN 112-27-6
CMF C6 H14 O4

CM 5

CRN 106-91-2
CMF C7 H10 O3



L179 ANSWER 12 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:990767 ZCAPLUS Full-text
DOCUMENT NUMBER: 124:37673
ORIGINAL REFERENCE NO.: 124:7005a,7008a
TITLE: Adsorbent for removing HIV from body fluids
INVENTOR(S): Motomura, Tadahiro; Miyashita, Yuko; Ohwada, Takashi; Onishi, Makoto; Yamamoto, Naoki
PATENT ASSIGNEE(S): Terumo K K, Japan
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 679436	A1	19951102	EP 1995-400972	19950428
EP 679436	B1	20000614		
R: BE, DE, FR, GB, IT, NL, SE				
JP 07289891	A	19951107	JP 1994-91793	19940428
JP 3615785	B2	20050202		
US 5667684	A	19970916	US 1995-429101	19950426
PRIORITY APPLN. INFO.:			JP 1994-91793 A	19940428

AB A material for conveniently removing human immunodeficiency virus (HIV) and related substances from blood, plasma, or other body fluids at high efficiency comprises a porous substrate on which sulfate groups, substantially as salts, are immobilized. Thus, a porous polypropylene membrane was irradiated with an Ar plasma and contacted with 2-methoxyethyl acrylate and glycidyl acrylate for surface graft polymerization Surface epoxy groups were converted to NH2 groups with aqueous NH3; the membrane was then reacted with NaIO4-oxidized dextran sulfate and neutralized with NaOH. Filtration of HIV-containing human plasma through the membrane resulted in 99.2% removal of HIV, ≥95% removal of envelope glycoprotein gp120, and ≥98% removal of protein p24.

IC ICM B01J020-32
ICS B01D015-00

CC 63-3 (Pharmaceuticals)

IT 155106-19-7D, aminated, reaction products with oxidized dextran sodium sulfate 155106-20-0D, reaction products with aminated dextran sodium sulfate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adsorbent for removing HIV from body fluids)

IT 79-06-1D, Acrylamide, polymers, graft 79-10-7D, Acrylic acid, alkoxyalkyl esters, graft copolymers 106-90-1D, Glycidyl acrylate, graft copolymers 106-91-2D, Glycidyl methacrylate, graft copolymers
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with hydrophobic polymer membranes; adsorbent for removing HIV from body fluids)

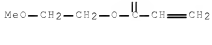
IT 155106-19-7D, aminated, reaction products with oxidized dextran sodium sulfate 155106-20-0D, reaction products with aminated dextran sodium sulfate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adsorbent for removing HIV from body fluids)

RN 155106-19-7 ZCAPLUS

CN 2-Propenoic acid, 2-methoxyethyl ester, polymer with oxiranylmethyl 2-propenoate and 1-propene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 3121-61-7
CMF C6 H10 O3

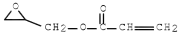


CM 2

CRN 115-07-1
CMF C3 H6

CM 3

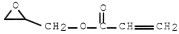
CRN 106-90-1
CMF C6 H8 O3



RN 155106-20-0 ZCAPLUS
CN 2-Propenoic acid, oxiranylmethyl ester, polymer with 1,1-difluoroethene, graft (9CI) (CA INDEX NAME)

CM 1

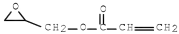
CRN 106-90-1
CMF C6 H8 O3



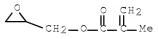
CM 2

CRN 75-38-7
CMF C2 H2 F2

IT 106-90-1D, Glycidyl acrylate, graft copolymers 106-91-2D, Glycidyl methacrylate, graft copolymers
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with hydrophobic polymer membranes; adsorbent for removing HIV from body fluids)
RN 106-90-1 ZCAPLUS
CN 2-Propenoic acid, 2-oxiranylmethyl ester (CA INDEX NAME)



RN 106-91-2 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)



L179 ANSWER 13 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:293551 ZCAPLUS Full-text
DOCUMENT NUMBER: 120:293551
ORIGINAL REFERENCE NO.: 120:51595a,51598a
TITLE: A pathogenic substance-removing material containing immobilized polyamine and a blood filter comprising the material
INVENTOR(S): Onishi, Makoto; Ohwada, Takashi; Tatebe, Ken; Ohmura, Yoshitaka; Shimura, Kenichi
PATENT ASSIGNEE(S): Terumo K. K., Japan
SOURCE: Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 586268	A1	19940309	EP 1993-401743	19930706
EP 586268	B1	20000223		
R: BE, DE, FR, GB, IT, NL, SE				
JP 06015167	A	19940125	JP 1992-178566	19920706
JP 06114250	A	19940426	JP 1992-270632	19921009
JP 06154323	A	19940603	JP 1992-313166	19921124
JP 3386835	B2	20030317		

PRIORITY APPLN. INFO.: JP 1992-178566 A 19920706
JP 1992-270632 A 19921009
JP 1992-313166 A 19921124

AB The title material has a polyamine compound immobilized on its base surface. The material is provided in the form of a porous membrane having a maximum pore diameter of 0.1-50 μm. The polyamine compound is at least one compound selected from: (a) a compound which has primary and secondary amines and a hydrophobic part between these amines; (b) -[C(R1)(R2)C(R3)(R4)N(R5)]n- (R1-5 = H, aliphatic and aromatic hydrocarbons, halo; n = ≥5); and (c) -[CH2CH(R)]n- (R = NH2, C1-4 aminoalkyl; n = ≥5). The blood filter comprises a housing which has an inlet and outlet, and the material arranged inside the housing. A polyvinylidene fluoride porous membrane was irradiated with argon plasma and 2-methoxyethyl acrylate was graft polymerized on the membrane surface. Spermidine was then immobilized on the membrane. With this membrane, the virus removal rate was 99.9% for removal of herpes virus type I from fresh human blood.

IC ICM A61L002-00
ICS A61L002-02; A61M001-36; C12N007-02; B01D067-00; B01D069-12; B01D071-60; B01D039-16
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 35, 63

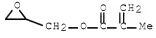
IT 106-91-2DP, polymer with methoxyethyl acrylate and urethanes
30109-97-8DP, reaction products with glycidyl methacrylate-polyurethane graft copolymer membrane 96550-06-0DP, Cationon UK, reaction products with glycidyl methacrylate-polyurethane graft copolymer membrane
152390-32-4DP, Panfix PX, reaction products with glycidyl methacrylate-polyurethane graft copolymer membrane
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of and leukocyte and blood platelet removal from erythrocyte solution with)

IT 71-44-3DP, Spermine, reaction products with membranes 124-20-9DP, Spermidine, reaction products with membranes 3121-61-7DP, 2-Methoxyethyl acrylate, polymer with glycidyl methacrylate, polyethyleneimine, and urethanes 9002-98-6DP, Polyethyleneimine, reaction products with membranes 30551-89-4DP, Polyallylamine, reaction products with membranes 125493-46-1DP, Glycidyl acrylate-propylene graft copolymer, spermidine reaction products 132789-87-8DP, spermidine reaction products 155106-19-7DP, polyamine reaction products 155106-20-0DP, polyethyleneimine reaction products
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of and virus removal from blood with)

IT 106-91-2DP, polymer with methoxyethyl acrylate and urethanes
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of and leukocyte and blood platelet removal from erythrocyte solution with)

RN 106-91-2 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)



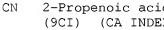
IT 125493-46-1DP, Glycidyl acrylate-propylene graft copolymer, spermidine reaction products 155106-19-7DP, polyamine reaction products 155106-20-0DP, polyethyleneimine reaction products
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of and virus removal from blood with)

RN 125493-46-1 ZCAPLUS

CN 2-Propenoic acid, oxiranylmethyl ester, polymer with 1-propene, graft (9CI) (CA INDEX NAME)

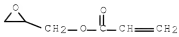
CM 1

CRN 115-07-1
CMF C3 H6



CM 2

CRN 106-90-1
CMF C6 H8 O3



RN 155106-19-7 ZCAPLUS
CN 2-Propenoic acid, 2-methoxyethyl ester, polymer with oxiranylmethyl 2-propenoate and 1-propene, graft (9CI) (CA INDEX NAME)

CM 1

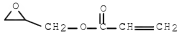
CRN 3121-61-7
CMF C6 H10 O3

CM 2

CRN 115-07-1
CMF C3 H6

CM 3

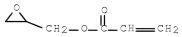
CRN 106-90-1
CMF C6 H8 O3



RN 155106-20-0 ZCAPLUS
CN 2-Propenoic acid, oxiranylmethyl ester, polymer with 1,1-difluoroethene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-90-1
CMF C6 H8 O3



CM 2

CRN 75-38-7
CMF C2 H2 F2

L179 ANSWER 14 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1993:109786 ZCAPLUS Full-text
DOCUMENT NUMBER: 118:109786
ORIGINAL REFERENCE NO.: 118:19032h,19033a
TITLE: Manufacture of moisturized medical goods
INVENTOR(S): Shimura, Kenichi; Yamaguchi, Isamu; Onishi, Masato
PATENT ASSIGNEE(S): Terumo Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04202441	A	19920723	JP 1990-336101	19901130
JP 07100744	B	19951101		
JP 2001120657	A	20010508	JP 2000-323147	20001023
JP 3347132	B2	20021120		

PRIORITY APPLN. INFO.: JP 1990-336101 A3 19901130

AB Surfaces of medical goods, e.g. catheters, are activated by plasmas for graft polymerization to introduce reactive groups, which bind with a water-swellable polymer to give a surface with good lubricity when inserted into the body. Thus, polypropylene sheet was irradiated with low-temperature plasma for 10 s and acrylic acid monomer was supplied for copolymn. The obtained sheet was treated with 5% 1,4-diaminobutane in acetone, followed by 2% maleic anhydride in acetone. The product was subjected to a friction resistance test and a platelet adhesion test.

IC ICM C08J007-18
ICS A61M025-00; C08J007-02
ICA C08F255-02
CC 63-7 (Pharmaceuticals)
IT 108-31-6D, Maleic anhydride, reaction products with propylene-acrylate copolymer and diaminobutane 26427-77-0D, reaction products with diaminobutane and maleic anhydride 26853-97-4D, reaction

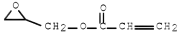
products with diaminobutane and maleic anhydride 69468-17-3D, Diaminobutane, reaction products with propylene-acrylate copolymer and maleic anhydride 106400-60-6D, Propylene-acrylic acid graft copolymer, reaction products with diaminobutane and maleic anhydride
RL: BIOL (Biological study)
(medical goods manufacture with)
IT 26853-97-4D, reaction products with diaminobutane and maleic anhydride
RL: BIOL (Biological study)
(medical goods manufacture with)
RN 26853-97-4 ZCAPLUS
CN 2-Propenoic acid, oxiranylmethyl ester, polymer with 1-propene (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1
CMF C3 H6

CM 2

CRN 106-90-1
CMF C6 H8 O3



L179 ANSWER 15 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1992:634767 ZCAPLUS Full-text
DOCUMENT NUMBER: 117:234767
ORIGINAL REFERENCE NO.: 117:40627a,40630a
TITLE: Process and apparatus for graft polymerization of polymer films
INVENTOR(S): Onishi, Masato; Shimura, Kenichi
PATENT ASSIGNEE(S): Terumo Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

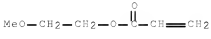
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04132713	A	19920507	JP 1990-253209	19900921
PRIORITY APPLN. INFO.:			JP 1990-253209	19900921

AB The title process, useful for manufacture of porous materials with grafted layers, consist of feeding a monomer to a polymerization chamber containing a substrate, graft polymerizing the monomer on the substrate in vacuum, removing the unreacted monomer, then repeating the process for several cycles. Thus, plasma graft polymerization of porous polypropylene with Et acrylate and methoxyethyl acrylate gave an elastomeric porous film with elongation at break 186%.

IC ICM C08F285-00
ICA B01J014-00
CC 35-9 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 38
IT 132789-84-5P 132789-90-3P 136268-80-9P 144644-66-6P
RL: PREP (Preparation)
(porous films, preparation of, by plasma, apparatus for)
IT 144644-66-6P
RL: PREP (Preparation)
(porous films, preparation of, by plasma, apparatus for)
RN 144644-66-6 ZCAPLUS
CN 2-Propenoic acid, 2-methoxyethyl ester, polymer with 1-ethenyl-4,5-dihydro-1H-imidazole, oxiranylmethyl 2-propenoate and 1-propene, graft (9CI) (CA INDEX NAME)

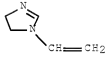
CM 1

CRN 3121-61-7
CMF C6 H10 O3



CM 2

CRN 1898-32-4
CMF C5 H8 N2

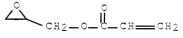


CM 3

CRN 115-07-1
CMF C3 H6

CM 4

CRN 106-90-1
CMF C6 H8 O3



L179 ANSWER 16 OF 16 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:516027 ZCAPLUS Full-text
DOCUMENT NUMBER: 115:116027
ORIGINAL REFERENCE NO.: 115:19899a,19902a
TITLE: Multifunctional porous membranes prepared by plasma polymerization
INVENTOR(S): Onishi, Masato
PATENT ASSIGNEE(S): Terumo Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03070750	A	19910326	JP 1989-205596	19890810
JP 2915932	B2	19990705		

PRIORITY APPLN. INFO.: JP 1989-205596 19890810

AB The title membranes for clin. and biol. applications contain ≥2 graft chains, at least on partial surface of the continuous-phase polymer, having functional properties chosen from hydrophilicity, mech. strength, rubbery elasticity, γ-ray resistance, decomposition-elution resistance, blood compatibility, biol. compatibility, cell affinity, slow release properties, antimicrobial properties, selective permeability, selective adsorption, catalytic activity, reactivity, ion-exchange properties, soil resistance, and stimulus responsiveness. A film was formed from 100 parts polypropylene and 350 parts liquid paraffin and impregnated under tension in Cl2CFCClF2 for 10 min to extract the paraffin, giving a 100-μm membrane with average pore diameter 0.45 μm and break elongation 8.5%. The membrane was plasma-grafted with dimethylacrylamide (I), Et acrylate, and methacrylic acid to give a hydrophilic membrane with break elongation 9.6%, vs. 3.8 for a control grafted with I alone.

IC ICM C08J009-36
ICS A61M001-16; B01D071-26; B01D071-34; B01D071-80

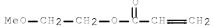
CC 38-3 (Plastics Fabrication and Uses)

IT 135848-15-6 135848-16-7 135848-17-8 135848-18-9
135848-19-0 135848-20-3 135848-21-4 135848-22-5
135868-46-1
RL: USES (Uses)
(membranes, manufacture of multifunctional, plasma polymerization for)

IT 135848-17-8 135848-20-3 135848-22-5
RL: USES (Uses)
(membranes, manufacture of multifunctional, plasma polymerization for)
RN 135848-17-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with 2-methoxyethyl 2-propenoate and 1-propene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 3121-61-7
CMF C6 H10 O3

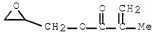


CM 2

CRN 115-07-1
CMF C3 H6

CM 3

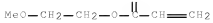
CRN 106-91-2
CMF C7 H10 O3



RN 135848-20-3 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with ethenylbenzene, 2-methoxyethyl 2-propenoate and 1-propene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 3121-61-7
CMF C6 H10 O3

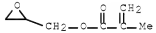


CM 2

CRN 115-07-1
CMF C3 H6

CM 3

CRN 106-91-2
CMF C7 H10 O3



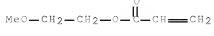
CM 4

CRN 100-42-5
CMF C8 H8

RN 135848-22-5 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with 1,1-difluoroethene and 2-methoxyethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

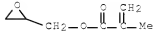
CM 1

CRN 3121-61-7
CMF C6 H10 O3



CM 2

CRN 106-91-2
CMF C7 H10 O3



CM 3

CRN 75-38-7
CMF C2 H2 F2

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=> file registry
FILE 'REGISTRY' ENTERED AT 14:40:23 ON 01 APR 2009
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STRUCTURE FILE UPDATES:   30 MAR 2009  HIGHEST RN 1129871-47-1
DICTIONARY FILE UPDATES:  30 MAR 2009  HIGHEST RN 1129871-47-1

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REGISTRY includes numerically searchable data for experimental and
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http://www.cas.org/support/stngen/stndoc/properties.html

=> file zcaplus
FILE 'ZCAPLUS' ENTERED AT 14:40:26 ON 01 APR 2009
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FILE COVERS 1907 - 1 Apr 2009  VOL 150 ISS 14
FILE LAST UPDATED: 31 Mar 2009  (20090331/ED)

ZCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

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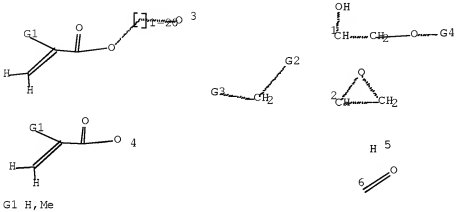
This file contains CAS Registry Numbers for easy and accurate
substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

=> d stat que L13
```

L8 8 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (25086-15-1/BI OR 42248-78-2/BI OR 852316-39-3/BI OR 852316-40-6/BI OR 852316-41-7/BI OR 852316-42-8/BI OR 852316-43-9/BI OR 852316-44-0/BI)

L9 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

Structure attributes must be viewed using STN Express query preparation.

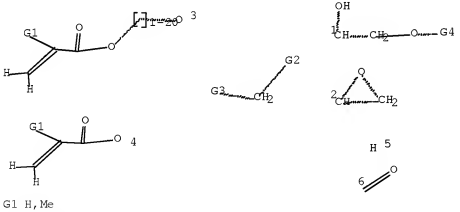
L11 26603 SEA FILE=REGISTRY SSS FUL L9

L12 6 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L11 AND L8

L13 3 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L12

=> d stat que L42

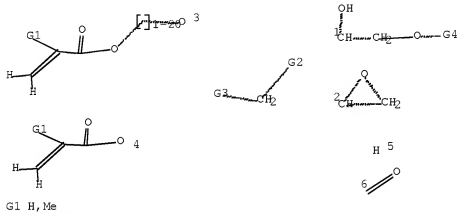
L9 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

```
Structure attributes must be viewed using STN Express query preparation.
L11        26603 SEA FILE=REGISTRY SSS FUL L9
L40            5 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  42248-78-2/CRN
L41            4 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L40 AND L11
L42            3 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L41

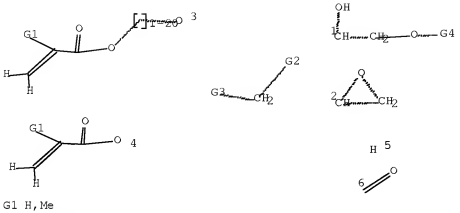

=> d stat que L53
L9                STR
```




```
G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]
```

```
Structure attributes must be viewed using STN Express query preparation.
L11        26603 SEA FILE=REGISTRY SSS FUL L9
L43         1373 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  622-97-9/CRN
L44        53228 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  79-41-4/CRN
L47           72 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L43 AND L44
L48           11 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L47 AND  L11
L53            7 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L48

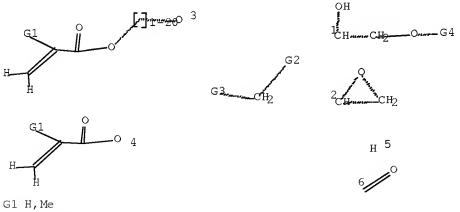

=> d stat que L62
L9                STR
```



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

```
Structure attributes must be viewed using STN Express query preparation.
L11        26603 SEA FILE=REGISTRY SSS FUL L9
L59           88 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (114672-18-3/CRN OR
                 124916-37-6/CRN OR 146166-74-7/CRN OR 146640-95-1/CRN OR
                 154801-40-8/CRN OR 37341-83-6/CRN OR 449760-01-4/CRN OR
                 476615-89-1/CRN OR 497955-73-4/CRN OR 56619-44-4/CRN OR
                 737791-65-0/CRN OR 755001-01-5/CRN OR 80123-03-1/CRN OR
                 828914-00-7/CRN OR 856646-54-3/CRN OR 9010-92-8/CRN OR
                 97287-46-2/CRN)
L60            1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L59 AND L11
L62            6 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L60

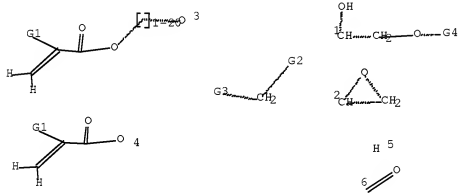

=> d stat que L84
L9                STR
```



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

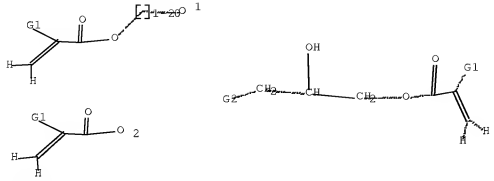
```
Structure attributes must be viewed using STN Express query preparation.
L11        26603 SEA FILE=REGISTRY SSS FUL L9
L44        53228 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  79-41-4/CRN
L55        81483 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  100-42-5/CRN
L56        14838 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L55 AND L44
L57         1556 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L56 AND L11
L72            7 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L57 AND 3/NC
L78            4 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (201614-97-3/RN OR
                 643758-48-9/RN OR 1126426-14-9/RN OR 173239-37-7/RN)
L79            1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L78 AND 11/C
L80            6 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L72 NOT L79
L81            1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  "(C8 H8 . C4 H6 O2)X
                 . X C7 H12 O4"/MF
L82            1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L80 AND GRAFT/CNS
L83            3 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L79 OR L81 OR L82
L84           14 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L83


=> d stat que L97
L9                 STR
```




```
G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]


Structure attributes must be viewed using STN Express query preparation.
L11        26603 SEA FILE=REGISTRY SSS FUL L9
L91                STR
```

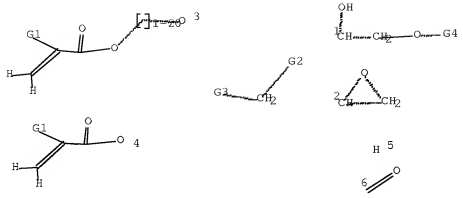


G1 H,Me
G2 [@1],[@2]

Structure attributes must be viewed using STN Express query preparation.
L92 STR

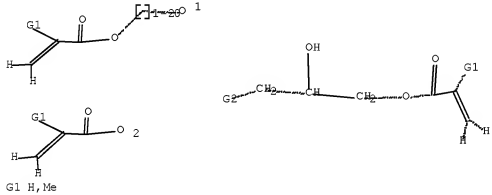
Structure attributes must be viewed using STN Express query preparation.
L94 58 SEA FILE=REGISTRY SUB=L11 SSS FUL L91 AND L92
L95 6 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L94 AND S/ELS
L96 4 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L95 NOT BR/ELS
L97 4 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L96

=> d stat que L101
L9 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

Structure attributes must be viewed using STN Express query preparation.
L11 26603 SEA FILE=REGISTRY SSS FUL L9
L91 STR

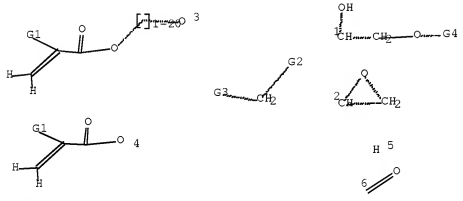


G1 H,Me
G2 [@1],[@2]

Structure attributes must be viewed using STN Express query preparation.
L92 STR

```
Structure attributes must be viewed using STN Express query preparation.
L94          58 SEA FILE=REGISTRY SUB=L11 SSS FUL L91 AND L92
L95           6 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L94 AND S/ELS
L98          52 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L94 NOT L95
L99           6 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L98 AND 2/NC
L100          3 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L99 NOT N/ELS
L101          4 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L100

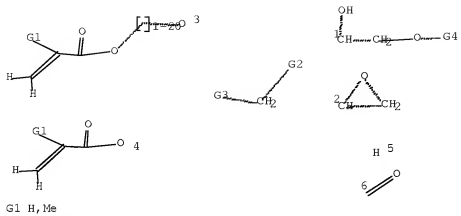

=> d stat que L113
L9               STR
```




```
G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]
```

```
Structure attributes must be viewed using STN Express query preparation.
L11       26603 SEA FILE=REGISTRY SSS FUL L9
L111        221 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (110100-95-3/CRN OR
                  114672-18-3/CRN OR 120293-17-6/CRN OR 124916-37-6/CRN OR
                  132010-67-4/CRN OR 146166-74-7/CRN OR 146640-95-1/CRN OR
                  148021-85-6/CRN OR 154801-40-8/CRN OR 25085-34-1/CRN OR
                  37341-83-6/CRN OR 42248-78-2/CRN OR 449760-01-4/CRN OR
                  476615-89-1/CRN OR 478361-55-6/CRN OR 497955-73-4/CRN OR
                  51852-76-7/CRN OR 56619-44-4/CRN OR 609771-10-0/CRN OR
                  709024-68-0/CRN OR 72108-82-8/CRN OR 737791-65-0/CRN OR
                  755001-01-5/CRN OR 784182-77-0/CRN OR 80123-03-1/CRN OR
                  828914-00-7/CRN OR 856646-54-3/CRN OR 856646-65-6/CRN OR
                  883883-97-4/CRN OR 9010-92-8/CRN OR 934472-62-5/CRN OR
                  97287-46-2/CRN)
L112         11 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L111 AND L11
L113         14 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L112

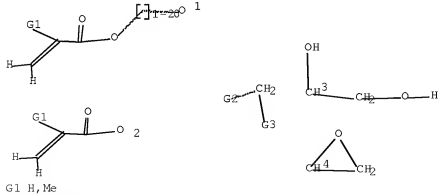

=> d stat que L135
L9               STR
```



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

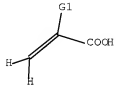
Structure attributes must be viewed using STN Express query preparation.
L11 26603 SEA FILE=REGISTRY SSS FUL L9
L92 STR

Structure attributes must be viewed using STN Express query preparation.
L116 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]

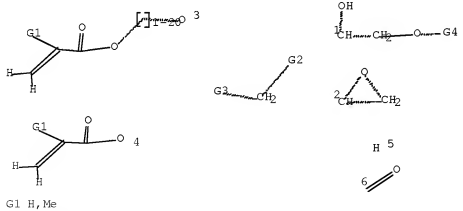
Structure attributes must be viewed using STN Express query preparation.
L117 STR



Structure attributes must be viewed using STN Express query preparation.
L119 2895 SEA FILE=REGISTRY SUB=L11 SSS FUL L92 AND L116 AND L117
L128 STR

Structure attributes must be viewed using STN Express query preparation.
L130 821 SEA FILE=REGISTRY SUB=L11 SSS FUL L128
L131 26 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L130 AND L119
L132 12 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L131
L133 651886 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?FILTER?/BI
L135 2 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L132 AND L133

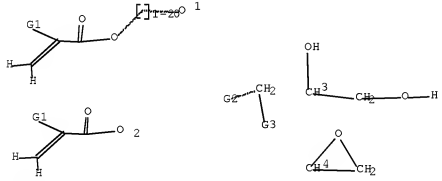
=> d stat que L136
L9 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

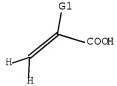
Structure attributes must be viewed using STN Express query preparation.
L11 26603 SEA FILE=REGISTRY SSS FUL L9
L92 STR

Structure attributes must be viewed using STN Express query preparation.
L116 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]

Structure attributes must be viewed using STN Express query preparation.
L117 STR



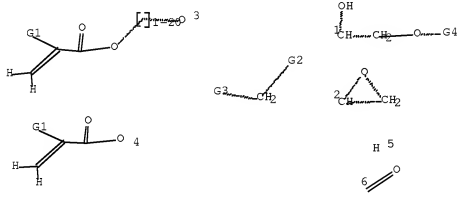
G1 Me,H

Structure attributes must be viewed using STN Express query preparation.
L119 2895 SEA FILE=REGISTRY SUB=L11 SSS FUL L92 AND L116 AND L117
L128 STR

—8

Structure attributes must be viewed using STN Express query preparation.
L130 821 SEA FILE=REGISTRY SUB=L11 SSS FUL L128
L131 26 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L130 AND L119
L132 12 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L131
L134 827768 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON COLOR?/BI
L136 2 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L132 AND L134

=> d stat que L144
L8 8 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (25086-15-1/BI OR 42248-78-2/BI OR 852316-39-3/BI OR 852316-40-6/BI OR 852316-41-7/BI OR 852316-42-8/BI OR 852316-43-9/BI OR 852316-44-0/BI)
L9 STR



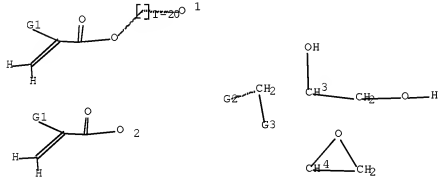
G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

Structure attributes must be viewed using STN Express query preparation.
L11 26603 SEA FILE=REGISTRY SSS FUL L9
L12 6 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L11 AND L8
L92 STR

Structure attributes must be viewed using STN Express query preparation.

L111 221 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (110100-95-3/CRN OR 114672-18-3/CRN OR 120293-17-6/CRN OR 124916-37-6/CRN OR 132010-67-4/CRN OR 146166-74-7/CRN OR 146640-95-1/CRN OR 148021-85-6/CRN OR 154801-40-8/CRN OR 25085-34-1/CRN OR 37341-83-6/CRN OR 42248-78-2/CRN OR 449760-01-4/CRN OR 476615-89-1/CRN OR 478361-55-6/CRN OR 497955-73-4/CRN OR 51852-76-7/CRN OR 56619-44-4/CRN OR 609771-10-0/CRN OR 709024-68-0/CRN OR 72108-82-8/CRN OR 737791-65-0/CRN OR 755001-01-5/CRN OR 784182-77-0/CRN OR 80123-03-1/CRN OR 828914-00-7/CRN OR 856646-54-3/CRN OR 856646-65-6/CRN OR 883883-97-4/CRN OR 9010-92-8/CRN OR 934472-62-5/CRN OR 97287-46-2/CRN)

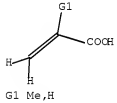
L116 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]

Structure attributes must be viewed using STN Express query preparation.

L117 STR

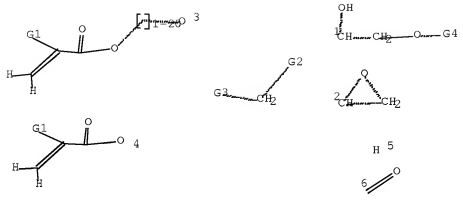


G1 Me,H

Structure attributes must be viewed using STN Express query preparation.

L119 2895 SEA FILE=REGISTRY SUB=L11 SSS FUL L92 AND L116 AND L117
L139 35 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L119 AND NC<4
L140 34 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L139 NOT L12
L142 34 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L140 AND 3/NC
L143 3 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L111 AND L142
L144 10 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L143

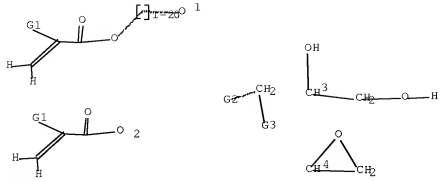
```
=> d stat que L148
L9                STR
```



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

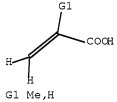
```
Structure attributes must be viewed using STN Express query preparation.
L11        26603 SEA FILE=REGISTRY SSS FUL L9
L92               STR
```

```
Structure attributes must be viewed using STN Express query preparation.
L116              STR
```



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]

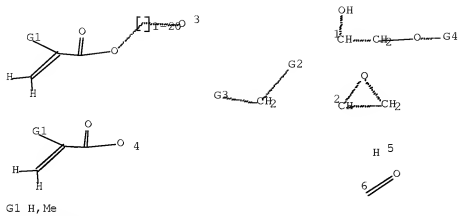
Structure attributes must be viewed using STN Express query preparation.
L117 STR



G1 Me,H

Structure attributes must be viewed using STN Express query preparation.
L119 2895 SEA FILE=REGISTRY SUB=L11 SSS FUL L92 AND L116 AND L117
L139 35 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L119 AND NC<4
L146 3 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L139 AND GRAFT?/CNS
L148 8 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L146

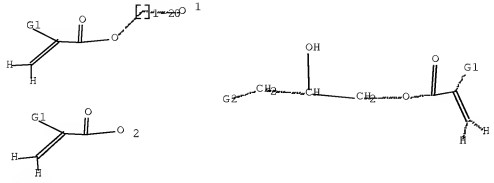
=> d stat que L150
L8 8 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (25086-15-1/BI OR 42248-78-2/BI OR 852316-39-3/BI OR 852316-40-6/BI OR 852316-41-7/BI OR 852316-42-8/BI OR 852316-43-9/BI OR 852316-44-0/BI)
L9 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

Structure attributes must be viewed using STN Express query preparation.

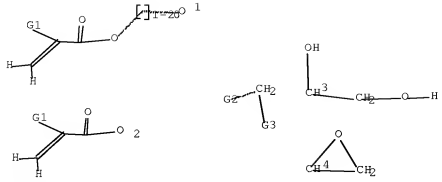
L11	26603	SEA FILE=REGISTRY SSS FUL L9
L12	6	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L11 AND L8
L13	3	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L12
L40	5	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 42248-78-2/CRN
L41	4	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L40 AND L11
L42	3	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L41
L43	1373	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 622-97-9/CRN
L44	53228	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 79-41-4/CRN
L47	72	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L43 AND L44
L48	11	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L47 AND L11
L53	7	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L48
L55	81483	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 100-42-5/CRN
L56	14838	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L55 AND L44
L57	1556	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L56 AND L11
L59	88	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (114672-18-3/CRN OR 124916-37-6/CRN OR 146166-74-7/CRN OR 146640-95-1/CRN OR 154801-40-8/CRN OR 37341-83-6/CRN OR 449760-01-4/CRN OR 476615-89-1/CRN OR 497955-73-4/CRN OR 56619-44-4/CRN OR 737791-65-0/CRN OR 755001-01-5/CRN OR 80123-03-1/CRN OR 828914-00-7/CRN OR 856646-54-3/CRN OR 9010-92-8/CRN OR 97287-46-2/CRN)
L60	1	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L59 AND L11
L62	6	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L60
L72	7	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L57 AND 3/NC
L78	4	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (201614-97-3/RN OR 643758-48-9/RN OR 1126426-14-9/RN OR 173239-37-7/RN)
L79	1	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L78 AND 11/C
L80	6	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L72 NOT L79
L81	1	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON "(C8 H8 . C4 H6 O2)X . X C7 H12 O4"/MF
L82	1	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L80 AND GRAFT/CNS
L83	3	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L79 OR L81 OR L82
L84	14	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L83
L91		STR



Structure attributes must be viewed using STN Express query preparation.
L92 STR

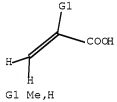
Structure attributes must be viewed using STN Express query preparation.

L94	58	SEA FILE=REGISTRY SUB=L11 SSS FUL L91 AND L92
L95	6	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L94 AND S/ELS
L96	4	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L95 NOT BR/ELS
L97	4	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L96
L98	52	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L94 NOT L95
L99	6	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L98 AND 2/NC
L100	3	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L99 NOT N/ELS
L101	4	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L100
L111	221	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (110100-95-3/CRN OR 114672-18-3/CRN OR 120293-17-6/CRN OR 124916-37-6/CRN OR 132010-67-4/CRN OR 146166-74-7/CRN OR 146640-95-1/CRN OR 148021-85-6/CRN OR 154801-40-8/CRN OR 25085-34-1/CRN OR 37341-83-6/CRN OR 42248-78-2/CRN OR 449760-01-4/CRN OR 476615-89-1/CRN OR 478361-55-6/CRN OR 497955-73-4/CRN OR 51852-76-7/CRN OR 56619-44-4/CRN OR 609771-10-0/CRN OR 709024-68-0/CRN OR 72108-82-8/CRN OR 737791-65-0/CRN OR 755001-01-5/CRN OR 784182-77-0/CRN OR 80123-03-1/CRN OR 828914-00-7/CRN OR 856646-54-3/CRN OR 856646-65-6/CRN OR 883883-97-4/CRN OR 9010-92-8/CRN OR 934472-62-5/CRN OR 97287-46-2/CRN)
L112	11	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L111 AND L11
L113	14	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L112
L116		STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]

Structure attributes must be viewed using STN Express query preparation.
L117 STR



G1 Me,H

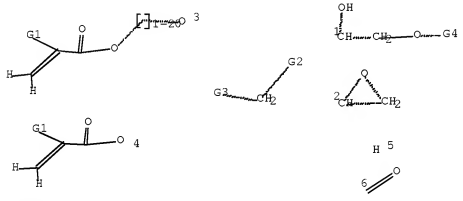
Structure attributes must be viewed using STN Express query preparation.
L119 2895 SEA FILE=REGISTRY SUB=L11 SSS FUL L92 AND L116 AND L117
L128 STR

Structure attributes must be viewed using STN Express query preparation.

L130	821	SEA FILE=REGISTRY SUB=L11 SSS FUL L128
L131	26	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L130 AND L119
L132	12	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L131
L133	651886	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?FILTER?/BI
L134	827768	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON COLOR?/BI
L135	2	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L132 AND L133
L136	2	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L132 AND L134
L139	35	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L119 AND NC<4
L140	34	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L139 NOT L12
L142	34	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L140 AND 3/NC
L143	3	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L111 AND L142
L144	10	SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L143
L146	3	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L139 AND GRAFT?/CNS

```
L148          8 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L146
L149         39 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L13 OR L42 OR L53 OR
                L62 OR L84 OR L97 OR L101 OR L113 OR L135 OR L135 OR L136 OR
                L144 OR L148
L150          6 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L149 AND L133

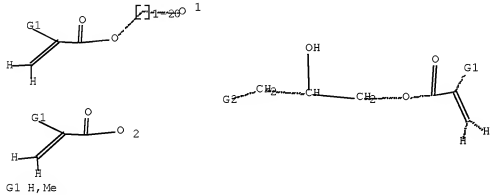

=> d stat que L151
L8            8 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (25086-15-1/BI OR
                42248-78-2/BI OR 852316-39-3/BI OR 852316-40-6/BI OR 852316-41-
                7/BI OR 852316-42-8/BI OR 852316-43-9/BI OR 852316-44-0/BI)
L9              STR
```



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

```
Structure attributes must be viewed using STN Express query preparation.
L11       26603 SEA FILE=REGISTRY SSS FUL L9
L12           6 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L11 AND L8
L13           3 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L12
L40           5 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  42248-78-2/CRN
L41           4 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L40 AND L11
L42           3 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L41
L43        1373 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  622-97-9/CRN
L44       53228 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  79-41-4/CRN
L47          72 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L43 AND L44
L48          11 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L47 AND  L11
L53           7 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L48
L55       81483 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  100-42-5/CRN
L56       14838 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L55 AND L44
L57        1556 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L56 AND L11
L59          88 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (114672-18-3/CRN OR
                124916-37-6/CRN OR 146166-74-7/CRN OR 146640-95-1/CRN OR
                154801-40-8/CRN OR 37341-83-6/CRN OR 449760-01-4/CRN OR
                476615-89-1/CRN OR 497955-73-4/CRN OR 56619-44-4/CRN OR
                737791-65-0/CRN OR 755001-01-5/CRN OR 80123-03-1/CRN OR
                828914-00-7/CRN OR 856646-54-3/CRN OR 9010-92-8/CRN OR
                97287-46-2/CRN)
L60           1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L59 AND L11
L62           6 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L60
```

L72 7 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L57 AND 3/NC
L78 4 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (201614-97-3/RN OR 643758-48-9/RN OR 1126426-14-9/RN OR 173239-37-7/RN)
L79 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L78 AND 11/C
L80 6 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L72 NOT L79
L81 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON "(C8 H8 . C4 H6 O2)X . X C7 H12 O4"/MF
L82 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L80 AND GRAFT/CNS
L83 3 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L79 OR L81 OR L82
L84 14 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L83
L91 STR



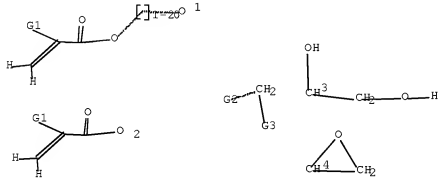
G1 H,Me
G2 [@1],[@2]

Structure attributes must be viewed using STN Express query preparation.
L92 STR

Structure attributes must be viewed using STN Express query preparation.
L94 58 SEA FILE=REGISTRY SUB=L11 SSS FUL L91 AND L92
L95 6 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L94 AND S/ELS
L96 4 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L95 NOT BR/ELS
L97 4 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L96
L98 52 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L94 NOT L95
L99 6 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L98 AND 2/NC
L100 3 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L99 NOT N/ELS
L101 4 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L100
L111 221 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (110100-95-3/CRN OR 114672-18-3/CRN OR 120293-17-6/CRN OR 124916-37-6/CRN OR 132010-67-4/CRN OR 146166-74-7/CRN OR 146640-95-1/CRN OR 148021-85-6/CRN OR 154801-40-8/CRN OR 25085-34-1/CRN OR 37341-83-6/CRN OR 42248-78-2/CRN OR 449760-01-4/CRN OR

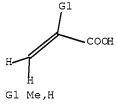
476615-89-1/CRN OR 478361-55-6/CRN OR 497955-73-4/CRN OR 51852-76-7/CRN OR 56619-44-4/CRN OR 609771-10-0/CRN OR 709024-68-0/CRN OR 72108-82-8/CRN OR 737791-65-0/CRN OR 755001-01-5/CRN OR 784182-77-0/CRN OR 80123-03-1/CRN OR 828914-00-7/CRN OR 856646-54-3/CRN OR 856646-65-6/CRN OR 883883-97-4/CRN OR 9010-92-8/CRN OR 934472-62-5/CRN OR 97287-46-2/CRN)

L112 11 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L111 AND L11
L113 14 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L112
L116 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]

Structure attributes must be viewed using STN Express query preparation.
L117 STR



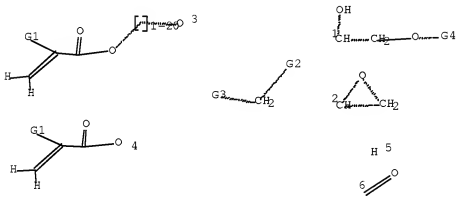
G1 Me,H

Structure attributes must be viewed using STN Express query preparation.
L119 2895 SEA FILE=REGISTRY SUB=L11 SSS FUL L92 AND L116 AND L117
L128 STR

Structure attributes must be viewed using STN Express query preparation.
L130 821 SEA FILE=REGISTRY SUB=L11 SSS FUL L128
L131 26 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L130 AND L119

```
L132          12 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L131
L133      651886 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?FILTER?/BI
L134      827768 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  COLOR?/BI
L135           2 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L132 AND L133
L136           2 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L132 AND L134
L139          35 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L119 AND NC<4
L140          34 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L139 NOT L12
L142          34 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L140 AND 3/NC
L143           3 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L111 AND L142
L144          10 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L143
L146           3 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L139 AND GRAFT?/CNS
L148           8 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L146
L149          39 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L13 OR L42 OR L53 OR
                 L62 OR L84 OR L97 OR L101 OR L113 OR L135 OR L135 OR L136 OR
                 L144 OR L148
L151           7 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L149 AND L134

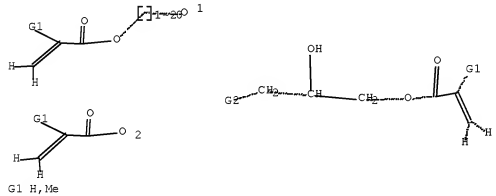

=> d stat que L159
L8             8 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (25086-15-1/BI OR
                 42248-78-2/BI OR 852316-39-3/BI OR 852316-40-6/BI OR 852316-41-
                 7/BI OR 852316-42-8/BI OR 852316-43-9/BI OR 852316-44-0/BI)
L9             STR
```




```
G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]


Structure attributes must be viewed using STN Express query preparation.
L11       26603 SEA FILE=REGISTRY SSS FUL L9
L12           6 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L11 AND L8
L13           3 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L12
L40           5 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  42248-78-2/CRN
L41           4 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L40 AND L11
L42           3 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L41
L43        1373 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  622-97-9/CRN
L44       53228 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  79-41-4/CRN
L47          72 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L43 AND L44
L48          11 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L47 AND  L11
L53           7 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L48
L55       81483 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  100-42-5/CRN
```

```
L56        14838 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L55 AND L44
L57         1556 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L56 AND L11
L59           88 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (114672-18-3/CRN OR
                 124916-37-6/CRN OR 146166-74-7/CRN OR 146640-95-1/CRN OR
                 154801-40-8/CRN OR 37341-83-6/CRN OR 449760-01-4/CRN OR
                 476615-89-1/CRN OR 497955-73-4/CRN OR 56619-44-4/CRN OR
                 737791-65-0/CRN OR 755001-01-5/CRN OR 80123-03-1/CRN OR
                 828914-00-7/CRN OR 856646-54-3/CRN OR 9010-92-8/CRN OR
                 97287-46-2/CRN)
L60             1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L59 AND L11
L62             6 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L60
L72             7 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L57 AND 3/NC
L78             4 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (201614-97-3/RN OR
                 643758-48-9/RN OR 1126426-14-9/RN OR 173239-37-7/RN)
L79             1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L78 AND 11/C
L80             6 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L72 NOT L79
L81             1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  "(C8 H8 . C4 H6 O2)X
                 . X C7 H12 O4"/MF
L82             1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L80 AND GRAFT/CNS
L83             3 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L79 OR L81 OR L82
L84            14 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L83
L91                STR
```



G1 H,Me
G2 [@1],[@2]

Structure attributes must be viewed using STN Express query preparation.

```
L92                STR
```

Structure attributes must be viewed using STN Express query preparation.

```
L94            58 SEA FILE=REGISTRY SUB=L11 SSS FUL L91 AND L92
L95             6 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L94 AND S/ELS
```

```
L96             4 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L95 NOT BR/ELS
L97             4 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L96
L98            52 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L94 NOT L95
L99             6 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L98 AND 2/NC
L100            3 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L99 NOT N/ELS
L101            4 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L100
L111          221 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (110100-95-3/CRN OR
                  114672-18-3/CRN OR 120293-17-6/CRN OR 124916-37-6/CRN OR
                  132010-67-4/CRN OR 146166-74-7/CRN OR 146640-95-1/CRN OR
                  148021-85-6/CRN OR 154801-40-8/CRN OR 25085-34-1/CRN OR
                  37341-83-6/CRN OR 42248-78-2/CRN OR 449760-01-4/CRN OR
                  476615-89-1/CRN OR 478361-55-6/CRN OR 497955-73-4/CRN OR
                  51852-76-7/CRN OR 56619-44-4/CRN OR 609771-10-0/CRN OR
                  709024-68-0/CRN OR 72108-82-8/CRN OR 737791-65-0/CRN OR
                  755001-01-5/CRN OR 784182-77-0/CRN OR 80123-03-1/CRN OR
                  828914-00-7/CRN OR 856646-54-3/CRN OR 856646-65-6/CRN OR
                  883883-97-4/CRN OR 9010-92-8/CRN OR 934472-62-5/CRN OR
                  97287-46-2/CRN)
L112           11 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L111 AND L11
L113           14 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L112
L116               STR
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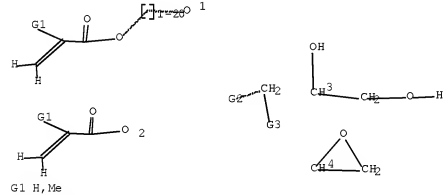

Structure attributes must be viewed using STN Express query preparation.

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L117               STR
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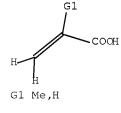

Structure attributes must be viewed using STN Express query preparation.

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L119        2895 SEA FILE=REGISTRY SUB=L11 SSS FUL L92 AND L116 AND L117
L128             STR
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—[8]

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Structure attributes must be viewed using STN Express query preparation.
L130         821 SEA FILE=REGISTRY SUB=L11 SSS FUL L128
L131          26 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L130 AND L119
L132          12 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L131
L133      651886 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?FILTER?/BI
L134      827768 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  COLOR?/BI
L135           2 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L132 AND L133
L136           2 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L132 AND L134
L139          35 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L119 AND NC<4
L140          34 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L139 NOT L12
L142          34 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L140 AND 3/NC
L143           3 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L111 AND L142
L144          10 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L143
L146           3 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L139 AND GRAFT?/CNS
L148           8 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L146
L149          39 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L13 OR L42 OR L53 OR
                 L62 OR L84 OR L97 OR L101 OR L113 OR L135 OR L135 OR L136 OR
                 L144 OR L148
L152         473 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L130
L153       24646 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  OPTICAL FILTER?/BI
L154          11 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L152 AND L153
L155       18399 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  COLOR FILTER?/BI
L156          13 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L152 AND L155
L157          14 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L154 OR L156
L159           1 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L157 AND L149


=> s (L13 or L42 or L53 or L62 or L84 or L97 or L101 or L113 or L135 or L136 or
L144 or L148 or L150 or L151 or L159) not L179
L180         35 (L13 OR L42 OR L53 OR L62 OR L84 OR L97 OR L101 OR L113 OR L135
                OR L136 OR L144 OR L148 OR L150 OR L151 OR L159) NOT L179

=> d ibib abs hitind hitstr L180 1-35

L180 ANSWER 1 OF 35  ZCAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2008:1009556  ZCAPLUS  Full-text
DOCUMENT NUMBER:          149:278538
TITLE:                    Graft polymers, curable compositions containing them
                          with high sensitivity, color filters having their
                          patterns, and their manufacture
INVENTOR(S):              Aizawa, Taeko; Shimada, Kazuto
PATENT ASSIGNEE(S):       Fuji Photo Film Co., Ltd., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 107pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
     JP 2008189747        A     20080821    JP 2007-24029           20070202
```

PRIORITY APPLN. INFO.: JP 2007-24029 20070202

AB The compns. contain graft polymers having branches containing ≥2 structural units of pendant ethylenically unsatd. double bonds. The compns. may further contain photopolymn. initiators, colorants, and sensitizers. The graft polymers having ethylenically unsatd. double bonds on the branches with high mobility can facilitate smooth polymerization as well as fast diffusion of solvents or developers into the uncured regions due to small occupied volume

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38

ST graft polymer curable compn high sensitivity color filter; methyl bromomethylpropanoyloxyethyl methacrylate polymer mercaptoethanol isocyanatoethyl macromonomer; methacrylic acid macromonomer graft polymer bromine elimination

IT Optical filters
(graft polymer curable compns. with high sensitivity for color filters)

IT Polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(graft; graft polymer curable compns. with high sensitivity for color filters)

IT 12217-34-4, Acid Red 57 14302-13-7, C.I. Pigment Green 36 82446-82-0, Vali Fast Yellow 1101 874963-72-1, C.I. Pigment Yellow 219
RL: TEM (Technical or engineered material use); USES (Uses)
(colorant; graft polymer curable compns. with high sensitivity for color filters)

IT 163148-66-1P 1047651-22-8P 1047651-24-0P 1047659-40-4P 1047659-42-6P 1047659-43-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(graft polymer curable compns. with high sensitivity for color filters)

IT 1047651-23-9DP, methacryloyl containing 1047651-25-1DP, methacryloyl containing 1047651-26-2DP, methacryloyl containing 1047659-41-5DP, methacryloyl containing 1047659-44-8P 1047659-49-3P 1047659-91-5P 1047659-98-2P 1047660-02-5P 1047660-03-6P 1047661-22-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(graft polymer curable compns. with high sensitivity for color filters)

IT 4986-89-4, Pentaerythritol tetraacrylate 29570-58-9, Dipentaerythritol hexaacrylate 215806-04-5, TO 1382
RL: TEM (Technical or engineered material use); USES (Uses)
(graft polymer curable compns. with high sensitivity for color filters)

IT 7189-82-4, 2,2'-Bis(2-chlorophenyl)-4,4',5,5'-tetraphenyl-1,2'-biimidazole 253585-83-0, CGI 124
RL: CAT (Catalyst use); USES (Uses)
(photopolymn. initiator; graft polymer curable compns. with high sensitivity for color filters)

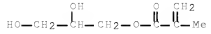
IT 902141-94-0
RL: TEM (Technical or engineered material use); USES (Uses)
(sensitizer; graft polymer curable compns. with high sensitivity for color filters)

IT 1047660-02-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(graft polymer curable compns. with high sensitivity for color

filters)
RN 1047660-02-5 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, telomer with 2-mercaptoethanol and methyl 2-methyl-2-propenoate, N-[2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]ethyl]carbamate, polymer with ethenylbenzene and phenylmethyl 2-methyl-2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester, graft (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

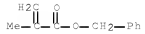


CM 2

CRN 1047659-43-7
CMF (C11 H12 O2 . C8 H8 . C7 H11 N O4 . x (C5 H8 O2 . C4 H6 O2)x . x C2 H6 O S)x
CCI PMS

CM 3

CRN 2495-37-6
CMF C11 H12 O2



CM 4

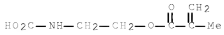
CRN 100-42-5
CMF C8 H8

CM 5

CRN 1047659-42-6
CMF C7 H11 N O4 . x (C5 H8 O2 . C4 H6 O2)x . x C2 H6 O S

CM 6

CRN 96571-20-9
CMF C7 H11 N O4



CM 7

CRN 163148-66-1
CMF (C5 H8 O2 . C4 H6 O2)x . C2 H6 O S

CM 8

CRN 60-24-2
CMF C2 H6 O S

CM 9

CRN 25086-15-1
CMF (C5 H8 O2 . C4 H6 O2)x
CCI PMS

CM 10

CRN 80-62-6
CMF C5 H8 O2

CM 11

CRN 79-41-4
CMF C4 H6 O2

L180 ANSWER 2 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1027710 ZCAPLUS Full-text
DOCUMENT NUMBER: 147:353258
TITLE: Photosensitive resin composition for dry-film photoresist for fabricating permanent photoresist pattern and method for pattern formation using the same
INVENTOR(S): Arioka, Daisuke; Kamikawa, Hiroshi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 113pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007232789	A	20070913	JP 2006-51032	20060227

PRIORITY APPLN. INFO.: JP 2006-51032 20060227

AB The title composition is made of: a resin which has a substituent excluding a benzyl group substituent, acidic groups, and ethylenic unsatd. groups in the side chains; polymerizable compds.; a photopolymn. initiator; and a heat-sensitive crosslinking agent, wherein the resin has 60-180° glass transition temperature and 7000-200,000 mol. weight and wherein the crosslinking agent has ≥80° m.p. and ≥10% solubility in Me Et ketone. The composition provides pattern of low surface tackiness, good release from protective film or a temporary support.

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 76

IT 114921-38-9, Methacrylic acid/methyl methacrylate copolymer ester with glycidyl methacrylate 119419-05-5 242814-92-2 948829-26-3, Butyl methacrylate-methacrylic acid copolymer ester with glycidyl methacrylate 949015-27-4 949015-28-5
RL: TEM (Technical or engineered material use); USES (Uses)
(resin; photosensitive resin composition for dry-film photoresist for fabricating permanent photoresist pattern)

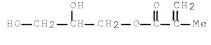
IT 119419-05-5
RL: TEM (Technical or engineered material use); USES (Uses)
(resin; photosensitive resin composition for dry-film photoresist for fabricating permanent photoresist pattern)

RN 119419-05-5 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

CRN 9010-92-8
CMF (C8 H8 . C4 H6 O2)x
CCI PMS

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-41-4
CMF C4 H6 O2

L180 ANSWER 3 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:702613 ZCAPLUS Full-text
DOCUMENT NUMBER: 147:129024
TITLE: Active energy ray-curable resin composition and method for forming resist pattern
INVENTOR(S): Hasegawa, Takeya; Kojima, Daisuke; Imai, Genji
PATENT ASSIGNEE(S): Japan
SOURCE: U.S. Pat. Appl. Publ., 7pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070148600	A1	20070628	US 2006-616705	20061227
JP 2007199695	A	20070809	JP 2006-344020	20061221
KR 2007069048	A	20070702	KR 2006-133622	20061226
CN 101004552	A	20070725	CN 2006-10064331	20061227

PRIORITY APPLN. INFO.: JP 2005-376240 A 20051227
OTHER SOURCE(S): MARPAT 147:129024

AB Disclosed are an active energy ray-curable resin composition, wherein when the active energy ray-curable resin composition is coated onto a substrate and made into a resist film with a predetd. thickness, a ratio (Y/X) of a quantity of a transmitted active energy ray (Y) after transmission through the resist

film to a quantity of an initial active energy ray (X) on the surface of the resist film is 10% or less in a spectral sensitivity wavelength range of the resist film; and a method for forming a resist pattern by using this composition

INCL 430311000

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 79-10-7DP, Acrylic acid, esters with epoxy resins 85-42-7DP, Hexahydrophthalic anhydride, reaction products with novolak epoxy resins 85-43-8DP, reaction products with epoxy resins 106-89-8DP, Epichlorohydrin, reaction products with epoxy resins 108-31-6DP, Maleic anhydride, reaction products with epoxy resins 1333-16-0DP, Bisphenol F, epoxy resin acrylates, reaction products 25639-41-2DP, Triphenolmethane, epoxy resins, reaction products 54466-56-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(active energy ray-curable resin composition for forming resist pattern)

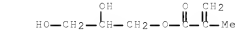
IT 54466-56-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(active energy ray-curable resin composition for forming resist pattern)

RN 54466-56-7 ZCAPLUS

CN 2-Propenoic acid, polymer with 2-propenoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

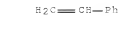


CM 2

CRN 25085-34-1
CMF (C8 H8 . C3 H4 O2)x
CCI PMS

CM 3

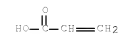
CRN 100-42-5
CMF C8 H8



CM 4

CRN 79-10-7

CMF C3 H4 O2



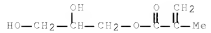
L180 ANSWER 4 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:1310786 ZCAPLUS Full-text
DOCUMENT NUMBER: 146:52392
TITLE: Resist polymer compositions with high resolution and good resistance to hydrofluoric acid, and etching of glass substrates using them
INVENTOR(S): Otsuka, Kaneyuki; Oda, Hiroshi
PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006337670	A	20061214	JP 2005-161576	20050601
PRIORITY APPLN. INFO.:			JP 2005-161576	20050601

AB The compns. contain (A) polymers having ≥1 ethylenically unsatd. bonds 20-90, (B) fillers 1-30, (C) polyfunctional acrylic monomers 1-60, and (D) photopolymn. initiators 0.1-30% (A + B + C + D = 100%), wherein A and C include 10-100% (to their total) components having 8-90% aromatic hydrocarbon groups. The glass substrates, e.g., EL display substrates, are etched via layers of the compns. to a depth of ≥6-fold the resist layer thickness. The compns. may further contain 0.3-5% silane coupling agents having epoxy groups.
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 57
IT 119419-05-5P, Methacrylic acid-styrene copolymer, ester with glycidyl methacrylate 152324-69-1P, Methacrylic acid-methyl methacrylate-styrene copolymer, ester with glycidyl methacrylate
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(neg. photoresists containing prescribed amount of aromatic hydrocarbon groups and having good HF resistance for glass substrate etching)
IT 119419-05-5P, Methacrylic acid-styrene copolymer, ester with glycidyl methacrylate
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(neg. photoresists containing prescribed amount of aromatic hydrocarbon groups and having good HF resistance for glass substrate etching)
RN 119419-05-5 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

CRN 9010-92-8
CMF (C8 H8 . C4 H6 O2)x
CCI PMS

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-41-4
CMF C4 H6 O2

L180 ANSWER 5 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:705924 ZCAPLUS Full-text
DOCUMENT NUMBER: 145:147047
TITLE: Polymerizable monomer compositions, gas-barrier films formed using them, and their manufacture
INVENTOR(S): Inaba, Yusaku; Okura, Masayuki; Kawashima, Mototaka
PATENT ASSIGNEE(S): Kureha Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2006188675	A	20060720	JP 2005-353915	20051207
PRIORITY APPLN. INFO.:			JP 2004-357877 A	20041210

AB The compns. comprise α,β-unsatd. carboxylic acid monomers and multifunctional (meth)acrylates having ≥2 C:C bonds in a weight ratio of 1:99 to 99.9:0.1. The gas-barrier films are manufactured by (1) forming coatings by applying the compns. on substrates and (2) preparing crosslinked films showing O permeability ≤50 × 10-4 cm3(STP)/m2-s-MPa at 30° and relative humidity 80% by polymerization treatment of the coatings with ionizing radiation and/or heating. Thus, 9 g acrylic acid and 1 g diacrylate 701A were blended to give a composition, which was applied on PET film (Lumirror P 60), covered by corona-treated nylon 6 film (Emblem ONBC), and irradiated with UV through the nylon 6 film to give a multilayer film showing O permeability 5 × 10-4 cm3(STP)/m2-s-MPa.

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 42

IT 898234-12-3P, Acrylic acid-NK Ester 701A copolymer 898234-16-7P, Acrylic acid-NK Ester ATM 4E copolymer 898234-19-0P, Methacrylic acid-NK Ester 701A copolymer 898234-23-6P, Cinnamic acid-NK Ester 701A copolymer 898234-27-0P, NK Ester 701A-tiglic acid copolymer 898234-29-2P, NK Ester ATM 4E-sorbic acid copolymer 898268-90-1P, Methacrylic acid-NK Ester A-TMM 3 copolymer 898268-91-2P, NK Ester A-TMM 3-senecioic acid copolymer 898269-09-5P, Acrylic acid-NK Ester A-TMM 3 copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic monomer compns. for manufacture of gas-barrier films)

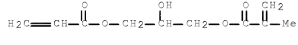
IT 898234-23-6P, Cinnamic acid-NK Ester 701A copolymer
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic monomer compns. for manufacture of gas-barrier films)

RN 898234-23-6 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl ester, polymer with 3-phenyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 1709-71-3
CMF C10 H14 O5



CM 2

CRN 621-82-9
CMF C9 H8 O2

L180 ANSWER 6 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:374897 ZCAPLUS Full-text
DOCUMENT NUMBER: 146:338286
TITLE: Synthesis and characterization of glycerol dimethacrylate cross linked polystyrene: a polymeric support for solid phase peptide synthesis
AUTHOR(S): Subhashchandran, K. P.; Vijayalekshmi, K. S.; Achuthan, T.; Ambika, V.; Vijitha, K.
CORPORATE SOURCE: P.G. Department of Chemistry, Sri Vyasa N.S.S. College, Thrissur, India
SOURCE: International Journal of Chemical Sciences (2005), 3(4), 604-610
CODEN: IJCSIL; ISSN: 0972-768X
PUBLISHER: Sadguru Publications
DOCUMENT TYPE: Journal
LANGUAGE: English

AB This article illustrates the application of a 10% glycerol dimethacrylate - cross linked polystyrene support (GDMA-PS) in manual solid phase peptide synthesis. The polymer was prepared using benzoyl peroxide as initiator via suspension polymerization in polyvinyl alc. yielding a beaded resin. GDMA - PS resin undergoes facile swelling in a variety of solvents; both, polar and non-polar, used in peptide synthesis. The polymer was functionalized with Friedel-Craft's chloromethylation reaction and further intergroup conversion to aminomethyl, hydroxy Me resins.

CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 38

IT 151755-77-0DP, chloromethyled, aminomethylated, or hydroxymethylated
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and characterization of glycerol dimethacrylate cross linked polystyrene: a polymeric support for solid phase peptide synthesis)

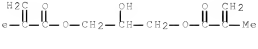
IT 107-30-2DP, Chloromethyl methyl ether, reaction products with glycerol dimethacrylate-styrene copolymer 151755-77-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and characterization of glycerol dimethacrylate cross linked polystyrene: a polymeric support for solid phase peptide synthesis)

IT 151755-77-0DP, chloromethyled, aminomethylated, or hydroxymethylated
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and characterization of glycerol dimethacrylate cross linked polystyrene: a polymeric support for solid phase peptide synthesis)

RN 151755-77-0 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,1'-(2-hydroxy-1,3-propanediyl) ester, polymer with ethenylbenzene (CA INDEX NAME)

CM 1

CRN 1830-78-0
CMF C11 H16 O5



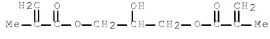
CM 2

CRN 100-42-5
CMF C8 H8

IT 151755-77-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and characterization of glycerol dimethacrylate cross linked polystyrene: a polymeric support for solid phase peptide synthesis)
RN 151755-77-0 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,1'-(2-hydroxy-1,3-propanediyl) ester, polymer with ethenylbenzene (CA INDEX NAME)

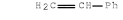
CM 1

CRN 1830-78-0
CMF C11 H16 O5



CM 2

CRN 100-42-5
CMF C8 H8



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L180 ANSWER 7 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:1289027 ZCAPLUS Full-text
DOCUMENT NUMBER: 144:23551
TITLE: Porous polymer monoliths suitable for use as stationary phases for liquid chromatography
INVENTOR(S): Hosoya, Ken; Shimbo, Kuniaki
PATENT ASSIGNEE(S): Showa Denko K.K., Japan
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005116095	A1	20051208	WO 2005-JP10311	20050531
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2006015333	A	20060119	JP 2005-142265	20050516
EP 1758945	A1	20070307	EP 2005-745903	20050531
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1961013	A	20070509	CN 2005-80017501	20050531
US 20080032116	A1	20080207	US 2006-597878	20061129
KR 2007033389	A	20070326	KR 2006-727849	20061229

PRIORITY APPLN. INFO.:	JP 2004-161773	A	20040531
	US 2004-578844P	P	20040614
	WO 2005-JP10311	W	20050531

AB An organic polymer monolith comprises monomer units derived from a monomer having a hydroxyl group and/or an amide group in an amount ≥ 20%, the polymer monolith having through pores with an average diameter from 0.5 to 10 μm, as measured by mercury porosimetry, and mesopores with an average diameter from 2 to 50 nm, as measured by a BET method, and a sp. surface area ≥ 50 m2/g, as measured by a BET method. The porous polymer monolith can be used as a stationary phase in liquid chromatog. columns for concentration or removal of chemical substances (e.g. pesticides). Thus, a homogeneous mixture of glycerol dimethacrylate (2.0), toluene (2.0 g) and AIBN (10 mg) was transferred into a glass test tube (inner diameter 1.0 cm, length 20 cm) and polymerized at 60° for 6 h under argon to obtain a crosslinked polymer as a highly opaque gel. The gel washed with THF had a network structure with well-connected through pores having an average diameter of 2.05 μm, mesopores with an average diameter of 9.08 nm, and a sp. surface area of 75.1 m2/g.

IC ICM C08F220-20
ICS C08F220-54; B01J020-26; B01J020-28

CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 80

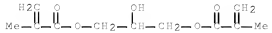
IT 25721-76-0P, Ethylene glycol dimethacrylate homopolymer 103135-96-2P, 1,3-Glycerol dimethacrylate polymer 870517-44-5P, Ethylene glycol dimethacrylate-1,3-glycerol dimethacrylate copolymer 870517-45-6P, m-Divinylbenzene-1,3-glycerol dimethacrylate copolymer
RL: AMX (Analytical matrix); IMF (Industrial manufacture); TEM (Technical or engineered material use); ANST (Analytical study); PREP (Preparation); USES (Uses)
(porous polymer monoliths suitable for use as stationary phases for liquid chromatog.)

IT 870517-45-6P, m-Divinylbenzene-1,3-glycerol dimethacrylate copolymer
RL: AMX (Analytical matrix); IMF (Industrial manufacture); TEM (Technical or engineered material use); ANST (Analytical study); PREP (Preparation); USES (Uses)

(porous polymer monoliths suitable for use as stationary phases for liquid chromatog.)
RN 870517-45-6 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-propanediyl ester, polymer with 1,3-diethenylbenzene (9CI) (CA INDEX NAME)

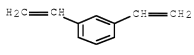
CM 1

CRN 1830-78-0
CMF C11 H16 O5



CM 2

CRN 108-57-6
CMF C10 H10



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L180 ANSWER 8 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:563496 ZCAPLUS Full-text
DOCUMENT NUMBER: 143:86727
TITLE: Lithographic printing plate precursor and lithographic printing method
INVENTOR(S): Yamasaki, Sumiaki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 41 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1547797	A2	20050629	EP 2004-30693	20041223
EP 1547797	A3	20060104		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
US 20050142483	A1	20050630	US 2004-17835	20041222
US 7214469	B2	20070508		
JP 2005231347	A	20050902	JP 2004-373852	20041224

PRIORITY APPLN. INFO.: JP 2003-432322 A 20031226
JP 2004-10320 A 20040119

AB The present invention provides a lithog. printing plate precursor and a lithog. printing method using the lithog. printing plate precursor, which is capable of an image recording by IR laser scanning and an on-press development and excellent in fine line reproducibility and press life while maintaining good on-press developing properties, the lithog. printing plate precursor comprising: a support; and an image recording layer capable of being removed by a printing ink and/or a fountain solution, in which the image recording layer comprises an IR absorber and a graft polymer having a specific graft chain.

IC ICM B41M005-36
ICS B41C001-10

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38

IT 25167-42-4P, Glycidylmethacrylate-styrene copolymer 26141-88-8P, Glycidylmethacrylate-methyl methacrylate copolymer 55031-95-3P, Acrylamide-glycidylmethacrylate copolymer 87500-53-6P, N,N-Dimethylacrylamide-glycidylmethacrylate copolymer 117431-80-8P , Glycidyl methacrylate-methacrylic acid-styrene graft copolymer 122864-03-3P, Acrylamide-glycidylmethacrylate-styrene graft copolymer 223565-98-8P, Glycidylmethacrylate-N-isopropylacrylamide-styrene graft copolymer 281668-28-8P, Glycidyl methacrylate-methyl methacrylate-methacrylic acid graft copolymer 855997-44-3P, Acrylamide-glycidyl methacrylate-methyl methacrylate graft copolymer 855997-45-4P, Acrylamide-ethyl methacrylate-glycidyl methacrylate graft copolymer 855997-46-5P, Acrylamide-glycidyl methacrylate-vinyl acetate graft copolymer 855997-47-6P, Acrylamide-tert-butyl methacrylate-glycidyl methacrylate graft copolymer 855997-50-1P, N,N-Dimethylacrylamide-ethyl methacrylate-glycidyl methacrylate graft copolymer 855997-52-3P, N,N-Dimethylacrylamide-glycidyl methacrylate-styrene graft copolymer 855997-54-5P, N,N-Dimethylacrylamide-glycidyl methacrylate-vinyl acetate graft copolymer 855997-56-7P, N,N-Dimethylacrylamide-tert-butyl methacrylate-glycidyl methacrylate graft copolymer 855997-57-8P, Glycidyl methacrylate-methacrylamide-methyl methacrylate graft copolymer 855997-58-9P, Glycidyl methacrylate-methyl methacrylate-methoxytetraethylene glycol monomethacrylate graft copolymer 855997-59-0P, Glycidyl methacrylate-N-isopropylacrylamide-methyl methacrylate graft copolymer 855997-60-3P, Glycidyl methacrylate-methacrylamide-styrene graft copolymer 855997-61-4P, Glycidyl methacrylate-methoxytetraethylene glycol monomethacrylate-styrene graft copolymer 855997-62-5P, 2-Acrylamido-2-methylpropanesulfonic acid-Glycidyl methacrylate-styrene graft copolymer 856011-61-5P, 2-Acrylamido-2-methylpropanesulfonic acid-Glycidyl methacrylate-methyl methacrylate graft copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(lithog. printing plate precursor containing)

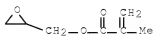
IT 117431-80-8P, Glycidyl methacrylate-methacrylic acid-styrene graft copolymer
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(lithog. printing plate precursor containing)

RN 117431-80-8 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and oxiranylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 79-41-4
CMF C4 H6 O2

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L180 ANSWER 9 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:993597 ZCAPLUS Full-text
DOCUMENT NUMBER: 141:417981
TITLE: Polymer compositions and heat-mode positive or negative lithographic plate materials using them with excellent sensitivity and scratch resistance
INVENTOR(S): Tsuchimura, Toshitaka
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 90 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004325508	A	20041118	JP 2003-115985	20030421
PRIORITY APPLN. INFO.:			JP 2003-115985	20030421

AB The materials have recording layers containing polymers having units X(COOH)(CnH2n+1) (X = tetravalent linking group; n = 6-40) and IR absorbers and varying solubility to alkaline aqueous solns. by IR laser exposure, thus giving pos. lithog. plates with good development latitude.

IC ICM G03F007-033
ICS G03F007-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 124996-93-6, Acrylonitrile-N-(p-aminosulfonylphenyl)methacrylamide-ethyl methacrylate copolymer 130303-94-5 141634-00-6, Acrylonitrile-N-(p-aminosulfonylphenyl)methacrylamide-methyl methacrylate copolymer 175221-27-9, Ethyl methacrylate-isobutyl methacrylate-methacrylic acid copolymer 631914-54-0 643758-48-9
RL: TEM (Technical or engineered material use); USES (Uses)
(binder, recording layer; heat-mode lithog. plates with good IR sensitivity and scratch resistance using polymers bearing carboxyl groups and long-chain alkyl groups)

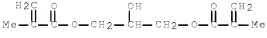
IT 643758-48-9
RL: TEM (Technical or engineered material use); USES (Uses)
(binder, recording layer; heat-mode lithog. plates with good IR sensitivity and scratch resistance using polymers bearing carboxyl groups and long-chain alkyl groups)

RN 643758-48-9 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and 2-hydroxy-1,3-propanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 1830-78-0
CMF C11 H16 O5



CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 79-41-4
CMF C4 H6 O2

L180 ANSWER 10 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:230833 ZCAPLUS Full-text
DOCUMENT NUMBER: 141:38954
TITLE: Synthesis of responsive polymer brushes via macromolecular anchoring layer
AUTHOR(S): Luzinov, Igor; Klep, Viktor; Minko, Sergiy; Iyer, K. Swaminathan; Draper, John; Zdyrko, Bogdan
CORPORATE SOURCE: School of Materials Science and Engineering, Clemson University, Clemson, SC, 29634, USA
SOURCE: PMSE Preprints (2004), 90, 224-225
CODEN: PPMRA9; ISSN: 1550-6703
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English

AB Switchable surfaces can be described as surfaces that have the ability to respond in a controllable fashion to specific environmental stimuli. A heterogeneous (mixed) polymer brush can provide a synthetic route to designing the responsive polymer surfaces. In the present communication, we describe synthesis of the mixed polymer brushes via macromol. anchoring layer. Namely, the brushes were grafted to the surface through ultrathin reactive poly(glycidyl methacrylate) film. The heterogeneous grafted layers were synthesized by "grafting to" approach, "grafting from" approach, and their combination. The morphol. and surface chemical composition of the responsive brushes were investigated using scanning probe microscopy and contact angle measurements. The brushes demonstrated pronounced tendencies to lateral and layered phase segregation. Rinsing the synthesized brushes in selective solvents and observing the change in water contact angle as a function of the grafted layer composition studied the switching nature of the surface.

CC 35-8 (Chemistry of Synthetic High Polymers)
IT 181525-78-0, Glycidyl methacrylate-styrene-acrylic acid graft copolymer 701976-17-2, Glycidyl methacrylate-styrene-2-vinyl pyridine graft copolymer
RL: PRP (Properties)
(synthesis of responsive polymer brushes via macromol. anchoring layer)
IT 181525-78-0, Glycidyl methacrylate-styrene-acrylic acid graft copolymer
RL: PRP (Properties)
(synthesis of responsive polymer brushes via macromol. anchoring layer)
RN 181525-78-0 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with ethenylbenzene and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

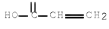
CRN 106-91-2
CMF C7 H10 O3

CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 79-10-7
CMF C3 H4 O2



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L180 ANSWER 11 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:35576 ZCAPLUS Full-text
DOCUMENT NUMBER: 140:102056
TITLE: Image-forming material and its lithography original plate for heat mode recording
INVENTOR(S): Tsuchimura, Toshitaka; Sorori, Tadahiro; Nakamura, Ippei
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 82 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004012770	A	20040115	JP 2002-165584	20020606
PRIORITY APPLN. INFO.:			JP 2002-165584	20020606

AB The lithog. original plate consists of a support having thereon a recording layer made from the image-forming material containing IR absorbers and graft (co)polymers involving hydrophobic components in the main chain or branch chains. The original plate has improved scratch resistance and lubricity to avoid transfer to rollers, protection paper, backside of the support, etc., upon fabrication and shipping.
IC ICM G03F007-00
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 130303-94-5 631914-54-0 643758-47-8 643758-48-9

RL: TEM (Technical or engineered material use); USES (Uses)
(alkali-soluble polymer; lithog. original plate with IR laser-sensitive image-forming layer containing hydrophobic graft copolymers)

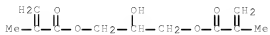
IT 643758-48-9
RL: TEM (Technical or engineered material use); USES (Uses)
(alkali-soluble polymer; lithog. original plate with IR laser-sensitive image-forming layer containing hydrophobic graft copolymers)

RN 643758-48-9 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and 2-hydroxy-1,3-propanediyl bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

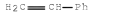
CM 1

CRN 1830-78-0
CMF C11 H16 O5



CM 2

CRN 100-42-5
CMF C8 H8



CM 3

CRN 79-41-4
CMF C4 H6 O2

L180 ANSWER 12 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:806134 ZCAPLUS Full-text
DOCUMENT NUMBER: 139:299204
TITLE: Photosensitive resin composition for solder resists
INVENTOR(S): Ono, Takao; Miura, Ichiro
PATENT ASSIGNEE(S): Tamura Kaken Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003295435	A	20031015	JP 2002-130173	20020328
PRIORITY APPLN. INFO.:			JP 2002-130173	20020328

AB A tack-free photosensitive resin composition comprises (A) a carboxyl group-containing (meth)acrylic polymer or an epoxy-modified carboxyl-containing polymer of (meth)acrylic monomers and styrene derivs., (B) a photosensitive resin containing at least two ethylenic bonds, (C) a reactive diluent, (D) a photopolymn. initiator, and (E) thermosetting compound

IC ICM G03F007-038
ICS G03F007-004; G03F007-027

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 79-10-7DP, Acrylic acid, epoxy resin acrylates 85-42-7DP, Hexahydrophthalic anhydride, epoxy resin esters 25068-38-6DP, Epikote 1001, reaction products with acrylic acid, hexahydrophthalic anhydride 85305-70-0DP, EOCN 104S, reaction products with acrylic acid, hexahydrophthalic anhydride 119419-05-5P 356536-16-8P 356536-17-9P 356536-18-0P 356536-20-4P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photosensitive resin composition for solder resists)

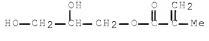
IT 119419-05-5P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photosensitive resin composition for solder resists)

RN 119419-05-5 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

CRN 9010-92-8
CMF (C8 H8 . C4 H6 O2)x
CCI PMS

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-41-4
CMF C4 H6 O2

L180 ANSWER 13 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:771726 ZCAPLUS Full-text
DOCUMENT NUMBER: 139:283408
TITLE: Light-sensitive electroconductive paste containing light-sensitive phenyl group-containing polymer for fabricating electrodes
INVENTOR(S): Shiota, Satoshi
PATENT ASSIGNEE(S): Dai Nippon Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003280195	A	20031002	JP 2002-85001	20020326
PRIORITY APPLN. INFO.:			JP 2002-85001	20020326

AB The title composition consists of electroconductive fine particles, a light-sensitive polymer, an alkali soluble resin, light-sensitive resin-curing agent, a photopolymn. initiator, glass frit, and a solvent, wherein the light-sensitive polymer contains Ph group attached to the main chain. The composition shows good coatability and provides good electrodes of precise pattern.

IC ICM G03F007-038
ICS C08F290-12; G03F007-004; G03F007-027; G03F007-033; G03F007-40; H01B001-20

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 76

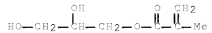
IT 7440-22-4, Silver, uses 28961-43-5, NK Ester A-TMPT 3EO 65697-21-4, Benzyl methacrylate/methacrylic acid copolymer 119419-05-5, Styrene-methacrylic acid copolymer ester with glycidyl methacrylate
RL: TEM (Technical or engineered material use); USES (Uses)
(light-sensitive electroconductive paste containing light-sensitive Ph group-containing polymer for fabricating electrodes)

IT 119419-05-5, Styrene-methacrylic acid copolymer ester with glycidyl methacrylate
RL: TEM (Technical or engineered material use); USES (Uses)
(light-sensitive electroconductive paste containing light-sensitive Ph

group-containing polymer for fabricating electrodes)
RN 119419-05-5 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

CRN 9010-92-8
CMF (C8 H8 . C4 H6 O2)x
CCI PMS

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-41-4
CMF C4 H6 O2

L180 ANSWER 14 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:750931 ZCAPLUS Full-text
DOCUMENT NUMBER: 137:286446
TITLE: Alkaline-developable photosolder resist composition and cured solder resist coating for printed circuit board
INVENTOR(S): Yabuuchi, Naoya; Fujita, Minoru; Nanba, Osamu; Okajima, Keiichi
PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002287353	A	20021003	JP 2001-92194	20010328

PRIORITY APPLN. INFO.: JP 2001-92194 20010328

AB The invention relates to a photosolder resist composition comprising (A) a resin comprised of (p-methyl)styrene, (meth)acrylic acid, and glycidyl methacrylate, (B) an inorg. filler, and (C) a photocurable mixture comprised of a polyfunctional acrylic monomer, a cycloether-containing compound, and a photopolymn. initiator. The photosolder resist composition may contain pigments. The photosolder resist composition is coated on a substrate, dried at 50-90°, exposed pattenwisely to an actinic ray, developed with an alkaline developer, and baked at 140-170° to obtain the cured solder resist coating. The photosolder resist composition shows excellent developability, solder heat-resistance, gold plating-resistance, thermal shock-resistance, and elec. insulating property.

IC ICM G03F007-038
ICS C08F008-00; C08G059-42; C08J003-05; C08K003-00; C08K005-00; C08K005-103; C08L025-02; G03F007-004; G03F007-027; G03F007-028; G03F007-40; C08L063-00

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 76

IT 58353-15-4P, Glycidyl methacrylate-methacrylic acid-styrene copolymer 464885-78-7P, Glycidyl methacrylate-methacrylic acid-methyl methacrylate-p-methylstyrene copolymer 464885-81-2P, tert-Butyl methacrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer 464885-83-4P, tert-Butyl methacrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer triethylamine salt
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(alkaline-developable photosolder resist composition for manufacturing printed circuit board)

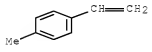
IT 464885-86-7P, Glycidyl methacrylate-methacrylic acid-styrene-pentaerythritol tetraacrylate-trimethylolpropane trimethacrylate copolymer 464885-89-0P, Glycidyl methacrylate-methacrylic acid-p-methylstyrene-methyl methacrylate-pentaerythritol tetraacrylate-trimethylolpropane trimethacrylate copolymer 464885-91-4P, tert-Butyl methacrylate-glycidyl methacrylate-methacrylic acid-styrene-pentaerythritol tetraacrylate-trimethylolpropane trimethacrylate copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(cured solder resist; alkaline-developable photosolder resist composition for manufacturing printed circuit board)

IT 464885-78-7P, Glycidyl methacrylate-methacrylic acid-methyl methacrylate-p-methylstyrene copolymer
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(alkaline-developable photosolder resist composition for manufacturing printed circuit board)

RN 464885-78-7 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-4-methylbenzene, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

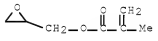
CM 1

CRN 622-97-9
CMF C9 H10



CM 2

CRN 106-91-2
CMF C7 H10 O3



CM 3

CRN 80-62-6
CMF C5 H8 O2

CM 4

CRN 79-41-4
CMF C4 H6 O2

IT 464885-89-0P, Glycidyl methacrylate-methacrylic

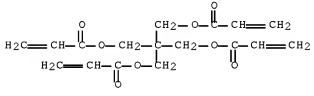
acid-p-methylstyrene-methyl methacrylate-pentaerythritol tetraacrylate-trimethylolpropane trimethacrylate copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(cured solder resist; alkaline-developable photosolder resist composition for
manufacturing printed circuit board)

RN 464885-89-0 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 1-ethenyl-4-methylbenzene, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl bis(2-methyl-2-propenoate), methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

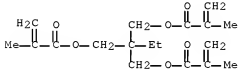
CM 1

CRN 4986-89-4
CMF C17 H20 O8



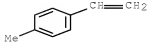
CM 2

CRN 3290-92-4
CMF C18 H26 O6



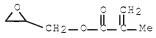
CM 3

CRN 622-97-9
CMF C9 H10



CM 4

CRN 106-91-2
CMF C7 H10 O3



CM 5

CRN 80-62-6
CMF C5 H8 O2

CM 6

CRN 79-41-4
CMF C4 H6 O2

L180 ANSWER 15 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:185448 ZCAPLUS Full-text
DOCUMENT NUMBER: 136:254344
TITLE: Synthetic resin lens and production method
INVENTOR(S): Oshikiri, Tatsuya; Oyaizu, Yasushi; Uno, Kenji
PATENT ASSIGNEE(S): Seed Co., Ltd., Japan
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002021165	A1	20020314	WO 2001-JP7641	20010904

W: US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

JP 2002082201	A	20020322	JP 2000-271994		20000907
JP 2003029004	A	20030129	JP 2001-213994		20010713
JP 3739676	B2	20060125			
EP 1316820	A1	20030604	EP 2001-961345		20010904
EP 1316820	B1	20080116			

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR

AT 384275	T	20080215	AT 2001-961345		20010904
US 20030130461	A1	20030710	US 2002-296796		20021126
US 6699953	B2	20040302			

PRIORITY APPLN. INFO.: JP 2000-271994 A 20000907
JP 2001-213994 A 20010713
WO 2001-JP7641 W 20010904

AB The invention refers to a synthetic resin lens comprising a copolymer with 20 - 80 weight% bis-2-methacryloyl thioethyl sulfide, CH2:C(CH3)COSCH2SCH2CH2SCOC(CH3):CH2, 5 - 50 weight% thiol with at least 2 functional groups, 0 - 75 weight% monomer(s) copolymerizable with these and preferably further contains 5 - 50 weight% bifunctional (meth)acrylic compound, with a refractive index of 1.58 or higher, an Abbe's number of 35 or higher, and a sp. gr. of 1.35 or lower.

IC ICM G02B001-04
ICS G02C007-02; C08F020-38

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

IT 219983-41-2 404013-05-4 404013-08-7 404013-10-1 404013-12-3
404013-14-5 404013-16-7 404013-18-9 404013-20-3
404013-22-5 404013-24-7
RL: DEV (Device component use); USES (Uses)
(lens made of synthetic resin and process for producing same)

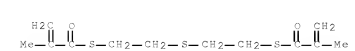
IT 404013-14-5
RL: DEV (Device component use); USES (Uses)
(lens made of synthetic resin and process for producing same)

RN 404013-14-5 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-propanediyl ester, polymer with 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate), ethenylbenzene, α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and S,S'-(thiodi-2,1-ethanediyl) bis(2-methyl-2-propenethioate) (9CI) (CA INDEX NAME)

CM 1

CRN 117651-91-9
CMF C12 H18 O2 S3

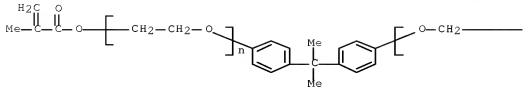


CM 2

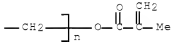
CRN 41637-38-1

CMF (C2 H4 O)n (C2 H4 O)n C23 H24 O4
CCI PMS

PAGE 1-A

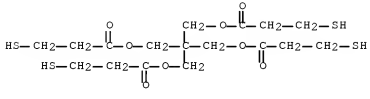


PAGE 1-B



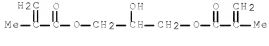
CM 3

CRN 7575-23-7
CMF C17 H28 O8 S4



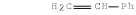
CM 4

CRN 1830-78-0
CMF C11 H16 O5



CM 5

CRN 100-42-5
CMF C8 H8

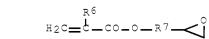


REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L180 ANSWER 16 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:617240 ZCAPLUS Full-text
DOCUMENT NUMBER: 135:202999
TITLE: Radiation-curable compositions and printed circuit board having solder resist film formed from the compositions
INVENTOR(S): Ohno, Takao; Ito, Masaru; Miura, Ichiro
PATENT ASSIGNEE(S): Tamura Kaken Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001228606	A	20010824	JP 2000-34807	20000214
JP 3648704	B2	20050518		
US 20020115739	A1	20020822	US 2001-782381	20010212
US 6475701	B2	20021105		

PRIORITY APPLN. INFO.: JP 2000-34807 A 20000214
GI



I

AB The compns. comprise (A) modified vinyl copolymer resin, prepared by adding epoxy compound I (R6 = H, Me; R7 = C1-12 alkylene, arylene) to a part of carboxyl groups of copolymers of (a) CH2:CHC6H3R1R2 (R1 = H, C1-6 aliphatic hydrocarbyl; R2 = H, OH, alkoxy) with (b) CH2:CR5CO2H (R5 = H, Me) and optionally (c) CH2:CR3CO2R4 (R3 = H, Me; R4 = C1-6 aliphatic hydrocarbyl, aryl), (B) bisphenol-based epoxy acrylates, (c) reactive diluents, (D) photopolymn. initiators, and (E) thermosetting compds. Also claimed is a printed circuit board, before or after mounting electronic devices, having a solder resist film as the cured product of the above composition The compns. are UV-sensitive and alkali developable, and provide a resist film having good adhesion, high solder heat resistance, and resistance to chems. such as CH2Cl2.

IC ICM G03F007-027
ICS G03F007-027; C08F008-14; C08F212-04; C08F220-04; C08F290-06; C08F290-12; C08L033-04; H05K003-28

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 76

IT 119419-05-5P, Methacrylic acid-styrene copolymer ester with glycidyl methacrylate 129639-53-8P 356536-16-8P 356536-17-9P 356536-18-0P 356536-20-4P
RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoresist compns. containing modified vinyl copolymers and bisphenol-based epoxy acrylates for fabrication of solder resist film on printed circuit board)

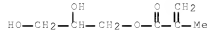
IT 119419-05-5P, Methacrylic acid-styrene copolymer ester with glycidyl methacrylate
RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photoresist compns. containing modified vinyl copolymers and bisphenol-based epoxy acrylates for fabrication of solder resist film on printed circuit board)

RN 119419-05-5 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

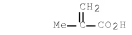
CRN 9010-92-8
CMF (C8 H8 . C4 H6 O2)x
CCI PMS

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-41-4
CMF C4 H6 O2



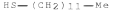
L180 ANSWER 17 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:280517 ZCAPLUS Full-text
DOCUMENT NUMBER: 134:318615
TITLE: Electrophotographic toner, developer, and development
INVENTOR(S): Serizawa, Manabu; Ishiyama, Takao; Shoji, Takeshi; Maehata, Hideo; Watanabe, Yukiko
PATENT ASSIGNEE(S): Fuji Xerox Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001109189	A	20010420	JP 1999-284173	19991005
PRIORITY APPLN. INFO.:			JP 1999-284173	19991005

AB The invention relates to the electrophotog. toner with improved glossiness and fixability, wherein the toner binder satisfies a specific relation between its weight average mol. weight, its glass transition temperature, and its crosslinking agent amount The toner is suitable for forming color images on both sides of an image receptor sheet.
IC ICM G03G009-087
ICS G03G009-08; G03G009-09; G03G015-20
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
IT 335152-13-1P, Acrylic acid-butyl acrylate-1,10-decanediol diacryate-styrene graft copolymer telomer with dodecyl mercaptan
335152-14-2P, Acrylic acid-butyl acrylate-1,6-hexanediol diacryate-styrene copolymer telomer with dodecyl mercaptan 335152-16-4P
335152-18-6P, Acrylic acid-butyl acrylate-divinyl adipate-styrene copolymer telomer with dodecyl mercaptan
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(crosslinked binder in electrophotog. toner with excellent glossiness and fixability)
IT 335152-16-4P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(crosslinked binder in electrophotog. toner with excellent glossiness and fixability)
RN 335152-16-4 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-propanediyl ester, telomer with butyl 2-propenoate, 1-dodecanethiol, ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 112-55-0
CMF C12 H26 S

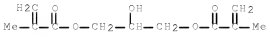


CM 2

CRN 335152-15-3
CMF (C11 H16 O5 . C8 H8 . C7 H12 O2 . C3 H4 O2)x
CCI PMS

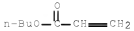
CM 3

CRN 1830-78-0
CMF C11 H16 O5



CM 4

CRN 141-32-2
CMF C7 H12 O2

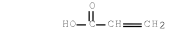


CM 5

CRN 100-42-5
CMF C8 H8

CM 6

CRN 79-10-7
CMF C3 H4 O2



L180 ANSWER 18 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:142433 ZCAPLUS Full-text
DOCUMENT NUMBER: 130:224397
TITLE: Manufacture of reactive resin aqueous dispersions with excellent storage stability and radiation-curable over-print varnish compositions and radiation-curable ink compositions based on them
INVENTOR(S): Okazaki, Eiichi; Mimatsu, Tetsushi
PATENT ASSIGNEE(S): Toa Gosei Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11060659	A	19990302	JP 1997-235496	19970818
PRIORITY APPLN. INFO.:			JP 1997-235496	19970818

AB (meth)acryloyl and CO2H group-containing polymers having acid value 50-500 and Mn 1000-15,000 obtained from CO2H-containing (meth)acrylates and optionally other comonomers having 1 ethylenically unsatd. bond by continuous polymerization at 150-310° are subjected to addition reaction with epoxy-containing (meth)acrylates in reactive diluents to give reactive resins having acid value 20-150, then the resulting reaction mixts. are dispersed in alkaline aqueous media. Thus, 30 parts acrylic acid and 70 parts styrene were polymerized at 270-271° to Mn of 4100 and acid value of 220, then 50 g of the resulting polymer was dissolved in 69.5 g Aronix M 220 (tripropylene glycol diacrylate) with hydroquinone mono-Me ether, treated with 19.5 g glycidyl methacrylate in the presence of Bu4NBr to the acid value of 47.4, and dispersed in H2O with Darocur 1173 and triethanolamine to give a dispersion showing viscosity 25 cP and no change after 200 h at 40°. The dispersion was applied on a steel sheet, dried, and irradiated with UV to form a colorless coating showing pencil hardness 4H.

IC ICM C08F290-12
ICS C09D004-00; C09D005-00; C09D011-00; G03F007-027; C09J004-00

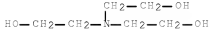
CC 42-7 (Coatings, Inks, and Related Products)

IT 221130-91-2P, Acrylic acid-styrene copolymer ester with glycidyl methacrylate, polymer with polypropylene glycol diacrylate, triethanolamine salt 221130-98-9P, Acrylic acid-styrene copolymer ester with glycidyl methacrylate, polymer with Aronix M 220, triethanolamine salt 221131-01-7P, Acrylic acid-α-methylstyrene-styrene copolymer ester with glycidyl methacrylate, polymer with Aronix M 350, triethylamine salt 221131-03-9P, Acrylic acid-α-methylstyrene-styrene copolymer ester with glycidyl methacrylate, polymer with Aronix M 220, triethanolamine salt
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of storage-stable aqueous dispersions of reactive acrylic resins

for varnishes and inks)
IT 221130-91-2P, Acrylic acid-styrene copolymer ester with glycidyl methacrylate, polymer with polypropylene glycol diacrylate, triethanolamine salt 221130-98-9P, Acrylic acid-styrene copolymer ester with glycidyl methacrylate, polymer with Aronix M 220, triethanolamine salt
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(manufacture of storage-stable aqueous dispersions of reactive acrylic resins
for varnishes and inks)
RN 221130-91-2 ZCAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)], compd. with 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6
CMF C6 H15 N O3

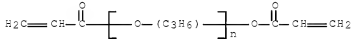


CM 2

CRN 221130-90-1
CMF ((C8 H8 . C3 H4 O2)x . x C7 H12 O4 . (C3 H6 O)n C6 H6 O3)x
CCI PMS

CM 3

CRN 52496-08-9
CMF (C3 H6 O)n C6 H6 O3
CCI IDS, PMS

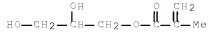


CM 4

CRN 54466-56-7
CMF (C8 H8 . C3 H4 O2)x . x C7 H12 O4

CM 5

CRN 5919-74-4
CMF C7 H12 O4



CM 6

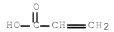
CRN 25085-34-1
CMF (C8 H8 . C3 H4 O2)x
CCI PMS

CM 7

CRN 100-42-5
CMF C8 H8

CM 8

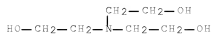
CRN 79-10-7
CMF C3 H4 O2



RN 221130-98-9 ZCAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate, compd. with 2,2',2''-nitrilotris[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 102-71-6
CMF C6 H15 N O3

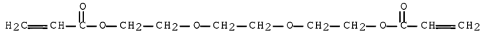


CM 2

CRN 221130-97-8
CMF (C15 H24 O6 . (C8 H8 . C3 H4 O2)x . x C7 H12 O4)x
CCI PMS

CM 3

CRN 42978-66-5
CMF C15 H24 O6
CCI IDS



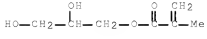
3 (D1—Me)

CM 4

CRN 54466-56-7
CMF (C8 H8 . C3 H4 O2)x . x C7 H12 O4

CM 5

CRN 5919-74-4
CMF C7 H12 O4



CM 6

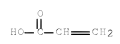
CRN 25085-34-1
CMF (C8 H8 . C3 H4 O2)x
CCI PMS

CM 7

CRN 100-42-5
CMF C8 H8

CM 8

CRN 79-10-7
CMF C3 H4 O2



L180 ANSWER 19 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:130820 ZCAPLUS Full-text
DOCUMENT NUMBER: 130:215925
TITLE: Presensitized lithographic original plate with image receiving layer containing hydrophilic polymer and inorganic filler
INVENTOR(S): Suzuki, Taro; Tanaka, Migaku
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11048630	A	19990223	JP 1997-210818	19970805
JP 2006027278	A	20060202	JP 2005-239817	20050822
PRIORITY APPLN. INFO.:			JP 1997-210818	A3 19970805

AB The lithog. original plate comprises a support having a porous image receiving layer (30-80% void ratio and 0.05-1 μm average vacancy size) containing a hydrophilic binder polymer and inorg. fillers with average primary particle size ≤0.1 μm, and the polymer chemical bonds with oleophilic component of image-forming material applied outside. The lithog. plate with oleophilic image areas on the original plate is also claimed. The plate shows good printing durability and ink repellency of non-image area and gives clear images without background stain.

IC ICM B41N001-14
ICS B32B005-18; C08L101-00; G03F007-00; G03F007-11

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

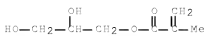
IT 3253-41-6P, Tetramethylolmethane tetramethacrylate 54466-56-7P
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photosensitive layer, chemical bonding with image receiving layer; presensitized lithog. original plate with image receiving layer containing hydrophilic polymer and inorg. filler)

IT 54466-56-7P
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photosensitive layer, chemical bonding with image receiving layer; presensitized lithog. original plate with image receiving layer containing hydrophilic polymer and inorg. filler)

RN 54466-56-7 ZCAPLUS
CN 2-Propenoic acid, polymer with 2-propenoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

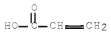
CRN 25085-34-1
CMF (C8 H8 . C3 H4 O2)x
CCI PMS

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-10-7
CMF C3 H4 O2



L180 ANSWER 20 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:72044 ZCAPLUS Full-text
DOCUMENT NUMBER: 130:160369
TITLE: Lightweight polymeric lens with high refractive index
INVENTOR(S): Oyaizu, Yasushi; Oshikiri, Tatsuya; Uno, Kenji
PATENT ASSIGNEE(S): Seed Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11023801	A	19990129	JP 1997-179206	19970704

PRIORITY APPLN. INFO.: JP 1997-179206 19970704

AB The lens with n ≥1.58 and sp. gr. ≤1.2 comprises a copolymer obtained from (X) 20-80 weight% reaction products of (A) polyoxyalkylene styryl Ph ether H(OCH2CH2)nOC6H4(CHMePh)1-5 (I; n = 1-5), (B) compds. substituted with radically polymerizable unsatd. groups and OH at the weight ratio to I 80:20-20:80, (C) thiols with S content ≥20% at the weight ratio to I 80:20-0:100, and (D) aromatic diisocyanates (80-100 weight% of OH in A and B and SH in C reacts with NCO in D) and (Y) 20-80 weight% other copolymerizable monomers. The lens shows easy dyeing property, good solvent resistance, and high mech. strength.

IC ICM G02B001-04
ICS C08F220-36; C08F220-38; C08F290-06; C08G018-67

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38

IT 220284-10-6DP, reaction products with diethylene glycol styrylphenyl ether 220284-11-7DP, reaction products with oligoethylene glycol styrylphenyl ether 220284-12-8DP, reaction products with polyurethanes 220284-13-9DP, reaction products with polyurethanes
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(lightwt. polymeric lens with high refractive index)

IT 220284-11-7DP, reaction products with oligoethylene glycol styrylphenyl ether
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(lightwt. polymeric lens with high refractive index)

RN 220284-11-7 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-propanediyl ester, polymer with bis(isocyanatomethyl)benzene, 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate), diethenylbenzene and ethenylbenzene (9CI) (CA INDEX NAME)

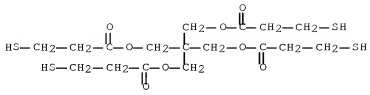
CM 1

CRN 25854-16-4
CMF C10 H8 N2 O2
CCI IDS

2 [D1—CH2—NCO]

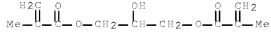
CM 2

CRN 7575-23-7
CMF C17 H28 O8 S4



CM 3

CRN 1830-78-0
CMF C11 H16 O5



CM 4

CRN 1321-74-0
CMF C10 H10
CCI IDS

CM 5

CRN 100-42-5
CMF C8 H8

L180 ANSWER 21 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:593828 ZCAPLUS Full-text
DOCUMENT NUMBER: 125:234578
ORIGINAL REFERENCE NO.: 125:43591a,43594a
TITLE: Polymerizable composition for color filter
INVENTOR(S): Ochiai, Tameichi; Takasaki, Ryuichiro; Endou, Noriko; Chika, Yuzuru
PATENT ASSIGNEE(S): Mitsubishi Chemical Corporation, Japan
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9623237	A1	19960801	WO 1995-JP2437	19951129
W: JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 758097	A1	19970212	EP 1995-938610	19951129
EP 758097	B1	20020821		
R: DE, FR, GB, NL				
JP 3709565	B2	20051026	JP 1996-522769	19951129
US 5916713	A	19990629	US 1996-704761	19960925

PRIORITY APPLN. INFO.: JP 1995-10109 A 19950125
WO 1995-JP2437 W 19951129
OTHER SOURCE(S): MARPAT 125:234578

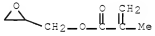
AB A polymerizable composition for use in producing color filters comprises a (meth)acrylic copolymer having an alicyclic (meth)acryloyl group in each of the side chains, a compound having at least one ethylenic unsatn., a photopolymn. initiator and a color material. A color filter is produced by coating a glass substrate with the composition, followed by light exposure and development. As this composition is highly sensitive and excellent in chemical resistance, it can provide a high-quality color filter without the necessity for protecting the same with, for example, an oxygen barrier film.

IC ICM G02B005-20
ICS G02B005-22; G03F007-038
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST acrylic copolymer color filter polymerizable compn; methacrylic copolymer color filter polymerizable compn
IT Optical filters
(polymerizable composition for color filter)
IT Optical imaging devices
(electrooptical liquid-crystal, polymerizable composition for color filter)
IT 90-93-7 90-94-8 840-57-3, 2-(p-Dimethylaminophenyl)benzoxazole
1707-68-2, 2,2'-Bis(o-chlorophenyl)-4,4',5,5'-tetraphenylbiimidazole
2562-71-2 10205-56-8, 2-(p-Dimethylaminophenyl)benzothiazole
42573-57-9 69432-40-2 97802-84-1 119313-12-1 154880-05-4
156360-76-8
RL: CAT (Catalyst use); USES (Uses)
(polymerizable composition for color filter)
IT 181525-77-9 181525-78-0, Acrylic acid-glycidyl methacrylate-styrene graft copolymer
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(polymerizable composition for color filter)
IT 181525-78-0, Acrylic acid-glycidyl methacrylate-styrene graft

copolymer
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(polymerizable composition for color filter)
RN 181525-78-0 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with ethenylbenzene and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-91-2
CMF C7 H10 O3

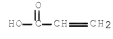


CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 79-10-7
CMF C3 H4 O2



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L180 ANSWER 22 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:9726 ZCAPLUS Full-text
DOCUMENT NUMBER: 120:9726
ORIGINAL REFERENCE NO.: 120:2093a,2096a
TITLE: Thermosetting resin compositions for in-mold coatable moldings and coated products
INVENTOR(S): Morishita, Natsuki; Yamamoto, Kazuyoshi
PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05124053	A	19930521	JP 1991-286458	19911031
PRIORITY APPLN. INFO.:			JP 1991-286458	19911031

AB The title compns. with good coated layer adhesion comprise unsatd. polyesters and compds. containing (meth)acryloyl and polar groups. Thus, 70 g blend of a 60:40 an isophthalic acid-based unsatd. polyester-styrene mixture (A) 60, a 30:70 polystyrene-styrene mixture low-shrinkage composition 30, acrylamide 10, NS-100 120, a peroxide 1, and Kyowamag 150 1 part was press molded. The mold was opened slightly, fed 10 mL mixture of (A) 100, NS-100 100, and the peroxide 1 part, and closed to give a mold with a 100-μm coated layer with crosscut adhesion 100/100.

IC ICM B29C043-18
ICS B29C043-20; B29C067-14; C08F299-04; C08J007-04

ICI B29K101-10, B29K105-06

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 42

IT 24981-13-3, Acrylamide-styrene copolymer 25101-27-3, Acrylonitrile-diethylene glycol dimethacrylate-styrene copolymer 26010-51-5, 2-Hydroxyethyl methacrylate-styrene copolymer 29226-76-4, Methacrylamide-styrene copolymer 54479-32-2, Acrylonitrile-3-methacryloxypropyltrimethoxysilane-styrene copolymer 56467-19-7, Acrylamide-3-methacryloxypropyltrimethoxysilane-styrene copolymer 79934-36-4, Acrylic acid-3-methacryloxypropyltrimethoxysilane-styrene copolymer 83708-54-7, Styrene-tetramethylolmethane triacrylate copolymer 151755-65-6, Acrylic acid-allyl methacrylate-styrene copolymer 151755-66-7, Allyl methacrylate-methacrylamide-styrene copolymer 151755-67-8, Acrylic acid-diethylene glycol dimethacrylate-styrene copolymer 151755-68-9 151755-69-0, Acrylamide-diethylene glycol dimethacrylate-styrene copolymer 151755-70-3, 2-Hydroxyethyl methacrylate-styrene-trimethylolpropane triacrylate copolymer 151755-71-4, Acrylamide-2-hydroxyethyl methacrylate-styrene-trimethylolpropane triacrylate copolymer 151755-72-5 151755-73-6, 2-Hydroxyethyl methacrylate-3-methacryloxypropyltrimethoxysilane-styrene copolymer 151755-74-7 151755-75-8, Acrylic acid-2-hydroxyethyl methacrylate-3-methacryloxypropyltrimethoxysilane-styrene copolymer 151755-76-9 151755-77-0, 2-Hydroxy-1,3-dimethacryloxypropane-styrene copolymer 151755-78-1, 2-Hydroxy-1,3-dimethacryloxypropane-2-hydroxyethyl methacrylate-styrene copolymer 151779-96-3, Methacrylamide-styrene-vinyl acrylate copolymer 151779-97-4, Diethylene glycol dimethacrylate-2-hydroxyethyl methacrylate-styrene copolymer 151779-98-5
RL: USES (Uses)
(unsatd. polyesters containing, for moldings having good adhesion to in-mold coatings)

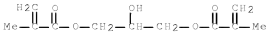
IT 151755-77-0, 2-Hydroxy-1,3-dimethacryloxypropane-styrene copolymer
RL: USES (Uses)
(unsatd. polyesters containing, for moldings having good adhesion to in-mold coatings)

RN 151755-77-0 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1'-(2-hydroxy-1,3-propanediyl) ester, polymer with ethenylbenzene (CA INDEX NAME)

CM 1

CRN 1830-78-0
CMF C11 H16 O5



CM 2

CRN 100-42-5
CMF C8 H8

L180 ANSWER 23 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1993:496990 ZCAPLUS Full-text
DOCUMENT NUMBER: 119:96990
ORIGINAL REFERENCE NO.: 119:17513a,17516a
TITLE: Sulfur-containing resins for optical materials
INVENTOR(S): Myazaki, Takeshi; Nakajima, Hiromitsu; Matsumoto, Takeo
PATENT ASSIGNEE(S): Nippon Oils & Fats Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

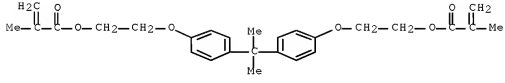
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05070524	A	19930323	JP 1991-235150	19910913
PRIORITY APPLN. INFO.:			JP 1991-235150	19910913

AB The title resins with good transparency and mech. strength, useful for lenses, etc., are manufactured by curing compns. containing polymerizable mixts. obtained by addition reaction of CH2:CR1CO2CH2CH(OH)CH2OCOCR2:CH2 (I: R1-2 = H, Me), HS(p-C6H4S)nH (n = 1, 2), and divinylbenzene (II). Thus, stirring a mixture of I (R1-2 = H) 5, p-C6H4(SH)2 45, and II 50 g in the presence of Et3N at room temperature for 6 h gave 100 g polymerizable mixture, 10 g of which and 0.05 g tert-Bu peroxybenzoate were cured in a glass mold at 80-100° and annealed 2 h at 100° to give a product with refractive index 1.653, Abbe number 30, b value 1.5, dyeability, and hard coat adhesion.
IC ICM C08F212-36
ICS C08F220-18; C08F220-28; G02B001-04
CC 37-3 (Plastics Manufacture and Processing)
IT 149295-44-3P 149295-45-4P 149295-46-5P 149295-47-6P
149295-48-7P 149295-49-8P 149295-50-1P 149295-51-2P 149295-52-3P
RL: PREP (Preparation)
(preparation of, transparent, heat-resistant, for lenses)

IT 149295-47-6P
RL: PREP (Preparation)
(preparation of, transparent, heat-resistant, for lenses)
RN 149295-47-6 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) ester, polymer with diethenylbenzene, 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl 2-methyl-2-propenoate, (1-methylethenyl)benzene and 4,4'-thiobis[benzenethiol] (9CI) (CA INDEX NAME)

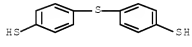
CM 1

CRN 24448-20-2
CMF C27 H32 O6



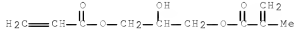
CM 2

CRN 19362-77-7
CMF C12 H10 S3



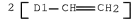
CM 3

CRN 1709-71-3
CMF C10 H14 O5



CM 4

CRN 1321-74-0
CMF C10 H10
CCI IDS



CM 5

CRN 98-83-9
CMF C9 H10

L180 ANSWER 24 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1989:115898 ZCAPLUS Full-text
DOCUMENT NUMBER: 110:115898
ORIGINAL REFERENCE NO.: 110:19125a,19128a
TITLE: Manufacture of radical-curable copolymers
INVENTOR(S): Matsui, Fumio; Suzuki, Noboru; Uematsu, Tomohide; Hashimoto, Tadayoshi; Ogura, Tateshi; Harigai, Noritama
PATENT ASSIGNEE(S): Showa Highpolymer Co., Ltd., Japan; Showa Denko K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63122706	A	19880526	JP 1986-270064	19861113

PRIORITY APPLN. INFO.: JP 1986-270064 19861113

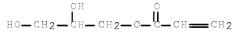
AB The title polymers were prepared by esterifying thermally polymerized styrene derivative-(meth)acrylic acid copolymers with equimolar [to (meth)acrylic acid] glycidyl (meth)acrylate. Thus, 100 g styrene and 16.4 g methacrylic acid were thermally polymerized at 175° for 4 h, and the resulting copolymer 100, styrene 110, glycidyl methacrylate 27, and hydroquinone 0.12 g were heated at 100° for 5 h to give a curable resin which was cured at 0.5 for Co naphthenate (6% Co) to give gel time 11 min, min. cure time 13.0 min, maximum exotherm 150°, tensile strength 6.5 kg/mm2, bending strength 12.9 kg/mm2, bending modulus 319 kg/mm2, and heat-distortion temperature 121°.

IC ICM C08F008-14
ICS C08F299-02
CC 37-3 (Plastics Manufacture and Processing)
IT 119418-18-7P 119419-05-5P
RL: PREP (Preparation)

(manufacture of radical-curable)
IT 119418-18-7P 119419-05-5P
RL: PREP (Preparation)
(manufacture of radical-curable)
RN 119418-18-7 ZCAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene, 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 10095-20-2
CMF C6 H10 O4

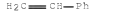


CM 2

CRN 25085-34-1
CMF (C8 H8 . C3 H4 O2)x
CCI PMS

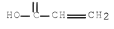
CM 3

CRN 100-42-5
CMF C8 H8



CM 4

CRN 79-10-7
CMF C3 H4 O2

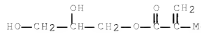


RN 119419-05-5 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4

CMF C7 H12 O4



CM 2

CRN 9010-92-8
CMF (C8 H8 . C4 H6 O2)x
CCI PMS

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-41-4
CMF C4 H6 O2

L180 ANSWER 25 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1988:591447 ZCAPLUS Full-text
DOCUMENT NUMBER: 109:191447
ORIGINAL REFERENCE NO.: 109:31703a,31706a
TITLE: Manufacture of radical-curable acrylic styrene resins
INVENTOR(S): Matsui, Fumio; Suzuki, Noboru; Uematsu, Tomohide; Hashimoto, Tadayoshi; Ogura, Tateshi; Harigai, Noritama
PATENT ASSIGNEE(S): Showa Highpolymer Co., Ltd., Japan; Showa Denko K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 63122708 A 19880526 JP 1986-270066 19861113
PRIORITY APPLN. INFO.: JP 1986-270066 19861113

AB The resins having good heat resistance and transparency are prepared by thermally polymerizing CH2:CRX [X = Ph, alkylphenyl, halophenyl; R = H, Me] and (meth)acrylic acid, followed by reacting with glycidyl (meth)acrylate at carboxy to epoxy molar ratio 1:1. Thus, polymerizing styrene (I) 76, methacrylic acid 23 and n-dodecylmercaptan 1% at 200° and 5-7 kg/cm2 to 57% I conversion, and treating with a mixture of I 200, glycidyl methacrylate 76.0 and hydroquinone 0.2 g at 100° for 5 h gave a resin solution, which was cured with Permek N and Co naphthenate at room temperature to give a transparent product with heat distortion temperature 125°.

IC ICM C08F008-14
ICS C08F020-28; C08F299-02

CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 35

IT 117431-80-8P 117431-81-9P
RL: PREP (Preparation)
(manufacture of, room temperature-curable, heat-resistant, transparent)

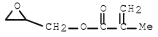
IT 117431-80-8P 117431-81-9P
RL: PREP (Preparation)
(manufacture of, room temperature-curable, heat-resistant, transparent)

RN 117431-80-8 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and oxiranylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 100-42-5
CMF C8 H8

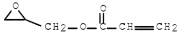
CM 3

CRN 79-41-4
CMF C4 H6 O2

RN 117431-81-9 ZCAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene and oxiranylmethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-90-1
CMF C6 H8 O3

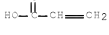


CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 79-10-7
CMF C3 H4 O2



L180 ANSWER 26 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1988:591446 ZCAPLUS Full-text
DOCUMENT NUMBER: 109:191446
ORIGINAL REFERENCE NO.: 109:31703a,31706a
TITLE: Manufacture of radical-curable acrylic-styrene resins
INVENTOR(S): Matsui, Fumio; Suzuki, Noboru; Uematsu, Tomohide; Hashimoto, Tadayoshi; Ogura, Tateshi; Harigai, Noritama
PATENT ASSIGNEE(S): Showa Highpolymer Co., Ltd., Japan; Showa Denko K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63122707	A	19880526	JP 1986-270065	19861113

PRIORITY APPLN. INFO.: JP 1986-270065 19861113

AB The resins having good heat resistance and transparency are prepared by thermally polymerizing CH2:CRX (X = Ph, alkylphenyl, halophenyl; R = H, Me) and glycidyl (meth)acrylate, followed by reacting with (meth)acrylic acid at epoxy to carboxy molar ratio 1:1. Thus, polymerizing styrene (I) 76, glycidyl methacrylate 23 and n-dodecylmercaptan 1% at 200° and 5-7 kg/cm2 to I 58% conversion and reacting with a mixture of I 200, methacrylic acid 27.9 and hydroquinone 0.2 g at 100° for 5 h gave a resin solution, which was cured with Permek N and Co naphthenate at room temperature to give a transparent product with heat distortion temperature 125°.

IC ICM C08F008-14
ICS C08F299-02

CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 35

IT 117431-80-8P 117431-81-9P
RL: PREP (Preparation)
(manufacture of, with improved heat resistance)

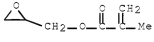
IT 117431-80-8P 117431-81-9P
RL: PREP (Preparation)
(manufacture of, with improved heat resistance)

RN 117431-80-8 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and oxiranylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 100-42-5
CMF C8 H8

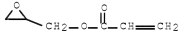
CM 3

CRN 79-41-4
CMF C4 H6 O2

RN 117431-81-9 ZCAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene and oxiranylmethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-90-1
CMF C6 H8 O3

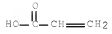


CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 79-10-7
CMF C3 H4 O2



L180 ANSWER 27 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1988:591445 ZCAPLUS Full-text
DOCUMENT NUMBER: 109:191445
ORIGINAL REFERENCE NO.: 109:31702h,31703a

TITLE: Manufacture of radical-curable acrylic styrene resins
INVENTOR(S): Matsui, Fumio; Suzuki, Noboru; Uematsu, Tomohide; Hashimoto, Tadayoshi; Ogura, Tateshi; Harigai, Noritama
PATENT ASSIGNEE(S): Showa Highpolymer Co., Ltd., Japan; Showa Denko K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

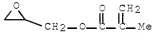
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63122705	A	19880526	JP 1986-270063	19861113
PRIORITY APPLN. INFO.:			JP 1986-270063	19861113

AB The resins having good heat resistance and transparency are prepared by thermally polymerizing CH2:CR X (R = H, Me; X = Ph, alkylphenyl, halophenyl) and glycidyl (meth)acrylate at 120-300°, followed by reacting with (meth)acrylic acid at epoxy to carboxy molar ratio 1:1. Thus, polymerizing styrene (I) 100, cumene 100 and glycidyl methacrylate 27.3 g at 175° for 4 h and reacting with a mixture of I 120, methacrylic acid 15.5 and hydroquinone 0.13 g at 100° for 5 h gave a resin, which was cured with Co naphthenate and a peroxide catalyst at room temperature to give a transparent product with heat distortion temperature 120°.

IC ICM C08F008-14
ICS C08F299-02
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 35
IT 117431-80-8P 117431-81-9P
RL: PREP (Preparation)
(manufacture of, room temperature-curable, heat-resistant, transparent)
IT 117431-80-8P 117431-81-9P
RL: PREP (Preparation)
(manufacture of, room temperature-curable, heat-resistant, transparent)
RN 117431-80-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and oxiranylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 100-42-5
CMF C8 H8

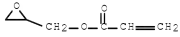
CM 3

CRN 79-41-4
CMF C4 H6 O2

RN 117431-81-9 ZCAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene and oxiranylmethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-90-1
CMF C6 H8 O3

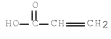


CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 79-10-7
CMF C3 H4 O2



L180 ANSWER 28 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1988:591444 ZCAPLUS Full-text
DOCUMENT NUMBER: 109:191444
ORIGINAL REFERENCE NO.: 109:31699a,31702a
TITLE: Manufacture of radical-curable acrylic-styrene resins
INVENTOR(S): Matsui, Fumio; Suzuki, Noboru; Uematsu, Tomohide; Hashimoto, Tadayoshi; Ogura, Tateshi; Harigai, Noritama
PATENT ASSIGNEE(S): Showa Highpolymer Co., Ltd., Japan; Showa Denko K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63122704	A	19880526	JP 1986-270062	19861113
JP 03057125	B	19910830		

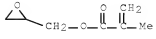
PRIORITY APPLN. INFO.: JP 1986-270062 19861113

AB The resins having good heat resistance and transparency are prepared by polymerization of CH2:CRX (I) (X = Ph, alkylphenyl, halophenyl; R = H, Me) and (meth)acrylic acid to ≤80% I conversion, followed by reacting with glycidyl (meth)acrylate at carboxy to epoxy molar ratio 1:1. Thus, a mixture of styrene 312, methacrylic acid 25.8, Bz2O2 3.4 and n-dodecylmercaptan 3.4 g was heated to 100° for 5 h to 75% I conversion, treated with 42.6 g glycidyl methacrylate and 0.2 g hydroquinone at 100° for 4 h to give a resin solution, which was cured with Co naphthenate and a peroxide at room temperature to give a transparent product with heat distortion temperature 124°.

IC ICM C08F008-14
ICS C08F212-06; C08F299-02
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 35
IT 117431-80-8P 117431-81-9P
RL: PREP (Preparation)
(manufacture of, room temperature-curable, heat-resistant, transparent)
IT 117431-80-8P 117431-81-9P
RL: PREP (Preparation)
(manufacture of, room temperature-curable, heat-resistant, transparent)
RN 117431-80-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and oxiranylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 100-42-5
CMF C8 H8

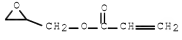
CM 3

CRN 79-41-4
CMF C4 H6 O2

RN 117431-81-9 ZCAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene and oxiranylmethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-90-1
CMF C6 H8 O3

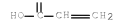


CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 79-10-7
CMF C3 H4 O2



L180 ANSWER 29 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1988:591443 ZCAPLUS Full-text
DOCUMENT NUMBER: 109:191443
ORIGINAL REFERENCE NO.: 109:31699a,31702a
TITLE: Manufacture of radical-curable acrylic-styrene resins
INVENTOR(S): Matsui, Fumio; Suzuki, Noboru; Uematsu, Tomohide; Hashimoto, Tadayoshi; Ogura, Tateshi; Harigai, Noritama
PATENT ASSIGNEE(S): Showa Highpolymer Co., Ltd., Japan; Showa Denko K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63122703	A	19880526	JP 1986-270061	19861113

PRIORITY APPLN. INFO.: JP 1986-270061 19861113

AB The resins having good heat resistance and transparency are prepared by polymerization of CH2:CRX (I, R = H, Me; X = Ph, alkylphenyl, halophenyl) and glycidyl (meth)acrylate to I conversion ≤80%, followed by reacting with (meth)acrylic acid at carbxoy to epoxy molar ratio 1:1. Thus, styrene (II) 300, glycidyl methacrylate (III) 45.4, Bz2O2 3.5, and n-dodecylmercaptan (IV) were heated at 115° for 2 h, treated with a mixture of II 128, III 45.4, Bz2O2 1.8 and IV 1.8 g at 115° for 1 h to 46% II conversion and further treated with 58.5 g methacrylic acid and 0.3 g hydroquinone at 100° for 4 h to give a resin, which was cured with Permek N and Co naphthenate to give a transparent product with heat distortion temperature 122°.

IC ICM C08F008-14
ICS C08F299-02

CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 35

IT 117431-80-8P 117431-81-9P
RL: PREP (Preparation)
(manufacture of, room temperature-curable, heat-resistant, transparent)

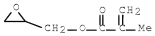
IT 117431-80-8P 117431-81-9P
RL: PREP (Preparation)
(manufacture of, room temperature-curable, heat-resistant, transparent)

RN 117431-80-8 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and oxiranylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 100-42-5
CMF C8 H8

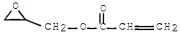
CM 3

CRN 79-41-4
CMF C4 H6 O2

RN 117431-81-9 ZCAPLUS
CN 2-Propenoic acid, polymer with ethenylbenzene and oxiranylmethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106-90-1
CMF C6 H8 O3

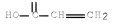


CM 2

CRN 100-42-5
CMF C8 H8

CM 3

CRN 79-10-7
CMF C3 H4 O2



L180 ANSWER 30 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1987:197894 ZCAPLUS Full-text
DOCUMENT NUMBER: 106:197894
ORIGINAL REFERENCE NO.: 106:32088h,32089a
TITLE: Preparation of nonaqueous dispersions of vinyl polymer microparticles with styrene polymer dispersants for coating compositions
INVENTOR(S): Das, Suryya K.; Dowbenko, Rostyslaw
PATENT ASSIGNEE(S): PPG Industries, Inc. , USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4639394	A	19870127	US 1985-718756	19850401

PRIORITY APPLN. INFO.: US 1985-718756 19850401

AB Yellowing of clear coats is prevented by incorporating the title microparticles with average particle size 0.1-10 μm in an organic liquid prepared by addition polymerization of vinyl monomers in the presence of a styrene polymer dispersant with terminal unsatd. groups. Living polymerization of 1314 parts p-methylstyrene gave a burgundy solution, which was capped with 9.8 parts ethylene oxide (orange solution) and terminated with 22.4 parts methacryloyl chloride to give a macromer (I) of number-average mol. weight 12,406. A stable nonaq. dispersion containing graft copolymer was prepared by polymerizing Me methacrylate 122.4, glycidyl methacrylate 7.5, and methacrylic acid 4.5 parts at 91° for a total reaction time of 4 h in the presence of 28.6 parts I in cyclohexane-heptane-PhMe.

IC B22B005-16; B22B027-06
ICM C08K005-01
ICS C08L053-00
INCL 428327000
CC 42-5 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35
IT 107702-23-8 107702-24-9 107702-25-0 107844-96-2
RL: USES (Uses)
(microparticle nonaq. dispersions, for nonyellowing coatings)
IT 107702-23-8
RL: USES (Uses)
(microparticle nonaq. dispersions, for nonyellowing coatings)

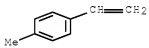
RN 107702-23-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-4-methylbenzene, methyl 2-methyl-2-propenoate, 2-methyl-2-propenoyl chloride, oxirane and oxiranylmethyl 2-methyl-2-propenoate, block, graft (9CI) (CA INDEX NAME)

CM 1

CRN 920-46-7
CMF C4 H5 Cl O

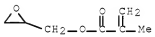
CM 2

CRN 622-97-9
CMF C9 H10



CM 3

CRN 106-91-2
CMF C7 H10 O3

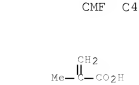


CM 4

CRN 80-62-6
CMF C5 H8 O2

CM 5

CRN 79-41-4
CMF C4 H6 O2



CM 6

CRN 75-21-8
CMF C2 H4 O

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L180 ANSWER 31 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1986:498620 ZCAPLUS Full-text
DOCUMENT NUMBER: 105:98620
ORIGINAL REFERENCE NO.: 105:15955a,15958a
TITLE: Polymer compositions
INVENTOR(S): Tsuda, Takashi; Yasuda, Yasutaro; Azuma, Takashiro
PATENT ASSIGNEE(S): Toa Gosei Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61064757	A	19860403	JP 1984-184547	19840905

PRIORITY APPLN. INFO.: JP 1984-184547 19840905

AB Compns. with good tensile and impact strength comprise synthetic polymers and inorg. fillers surface treated with graft polymers having branched macromonomer units. Thus, a macromonomer (number-average mol. weight 4700, weight-average mol. weight 9400, prepared from styrene, 3-mercaptopropionic acid, and glycidyl methacrylate) 40, styrene 50, acrylic acid 10, MIBK 90, and AIBN 2.3 parts were stirred 7 h at 85° to give 91 parts graft polymer which (5 parts) was dissolved in 200 parts acetone, mixed with 50 parts Al powder, allowed to stand overnight, filtered, and dried to give 51.8 parts surface-treated Al powder containing 3.4% polymer. The powder (5 parts) was mixed with 95 parts polystyrene at 170° for 5 min to prepare a test piece which had tensile strength 365 kg/cm and Charpy impact strength (without notch) 12.5 kg-cm/cm, vs. 272 and 7.4 when the Al powder was not treated.

IC ICM C08L101-00

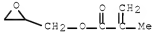
ICS C08K009-04
ICA C08F292-00
CC 37-6 (Plastics Manufacture and Processing)
IT 104089-07-8
RL: USES (Uses)
(aluminum filler particles treated by, polystyrene containing)
IT 104089-07-8
RL: USES (Uses)
(aluminum filler particles treated by, polystyrene containing)
RN 104089-07-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with ethenylbenzene, 3-mercaptopropanoic acid and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 107-96-0
CMF C3 H6 O2 S

CM 2

CRN 106-91-2
CMF C7 H10 O3



CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-10-7
CMF C3 H4 O2

L180 ANSWER 32 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1980:155924 ZCAPLUS Full-text
DOCUMENT NUMBER: 92:155924
ORIGINAL REFERENCE NO.: 92:25167a,25170a
TITLE: Pressure-sensitive recording systems
PATENT ASSIGNEE(S): Sumitomo Naugatuck Co., Ltd., Japan
SOURCE: Brit., 12 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1557887	A	19791212	GB 1976-49458	19761126
JP 52066009	A	19770601	JP 1975-142498	19751128
JP 58019475	B	19830418		
DK 7605319	A	19770529	DK 1976-5319	19761125
DK 145038	B	19820809		
DK 145038	C	19830117		
BE 848829	A1	19770526	BE 1976-172775	19761126
FR 2336259	A1	19770722	FR 1976-35779	19761126
FR 2336259	B1	19821001		
BR 7607954	A	19771108	BR 1976-7954	19761126
AU 7620048	A	19780601	AU 1976-20048	19761126
AU 501155	B2	19790614		
CA 1075463	A1	19800415	CA 1976-266627	19761126
CH 628575	A5	19820315	CH 1976-14944	19761126

PRIORITY APPLN. INFO.: JP 1975-142498 A 19751128

AB Copy sheets for use with pressure-sensitive transfer sheets, with improved light resistance of the developed colors, were manufactured with a coating containing an organic color developer and a copolymer latex binder with gel content 95-100%. The latex was manufactured by the emulsion polymerization of ≥1 aliphatic conjugated diolefin 20-70, ≥1 unsatd. carboxylic acid 0.5-15, and ≥1 olefinically unsatd. monomer 15-79.5%. Thus, to a mixture of butadiene 35, styrene 56.5, CH2:CHCO2H 1.5, fumaric acid 1.5, CH2:CMeCO2Me 4.5, and divinylbenzene 1.0% were added Na alkylbenzenesulfonate (mainly dodecyl-) 1.3, NaHCO3 0.7, K2S2O8 1.0, and H2O 100 parts and the mixture was polymerized 18 h at 70° under N. The pH was adjusted with NaOH to give a latex with gel content 99.7% and average particle size 0.16 μ. A coating composition was manufactured by mixing Zn salicylate 10, active clay 90, Na polyacrylate 0.6, oxidized starch 2, a copolymer latex 15 parts, and H2O to give solids content 30%. The composition was coated at 5 g/m2 (dry weight) onto wood-free paper to give a copy sheet which, when used with a com. transfer sheet, gave initial color d. 0.80 and had 53% light resistance after 2 days, compared with 0.75 and 20.0%, resp., for a latex with gel content 85.3%.

IC B41M005-16; B41M005-22

CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic Processes)
Section cross-reference(s): 37

IT Polymerization
(emulsion, latex binders manufactured by, for pressure-sensitive copying

sheet color-developing compns.)
IT Copying paper
(pressure-sensitive, color-developing compns. for, containing latex binders, for improved light resistance)
IT 52404-70-3 64422-44-2 64422-47-5 64422-49-7 64422-50-0 64509-41-7 73329-61-0 73329-62-1 73334-28-8
RL: USES (Uses)
(latex binders, pressure-sensitive copy sheets coated with color developers and, for improved light resistance)
IT 73329-62-1
RL: USES (Uses)
(latex binders, pressure-sensitive copy sheets coated with color developers and, for improved light resistance)
RN 73329-62-1 ZCAPLUS
CN Butanedioic acid, methylene-, telomer with 1,3-butadiene, diethenylbenzene, 1-dodecanethiol, ethenylbenzene, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 112-55-0
CMF C12 H26 S

CM 2

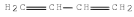
CRN 64422-48-6
CMF (C10 H10 . C8 H8 . C7 H10 O3 . C5 H6 O4 . C4 H6 . C3 H4 O2)x
CCI PMS

CM 3

CRN 1321-74-0
CMF C10 H10
CCI IDS

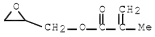
CM 4

CRN 106-99-0
CMF C4 H6



CM 5

CRN 106-91-2
CMF C7 H10 O3

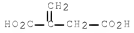


CM 6

CRN 100-42-5
CMF C8 H8

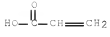
CM 7

CRN 97-65-4
CMF C5 H6 O4



CM 8

CRN 79-10-7
CMF C3 H4 O2



L180 ANSWER 33 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1977:602548 ZCAPLUS Full-text
DOCUMENT NUMBER: 87:202548
ORIGINAL REFERENCE NO.: 87:32081a,32084a
TITLE: Block copolymers as dispersion stabilizing agents
INVENTOR(S): Sinclair, Richard G.; Berry, David L.; Cremeans, George E.; Markle, Richard A.; Germon, Wesley M., Jr.
PATENT ASSIGNEE(S): Goodyear Tire and Rubber Co., USA
SOURCE: Ger. Offen., 39 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

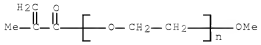
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2710248	A1	19770922	DE 1977-2710248	19770309
CA 1098248	A1	19810324	CA 1977-272519	19770223
AU 7722764	A	19780907	AU 1977-22764	19770228
AU 507543	B2	19800221		
ZA 7701225	A	19780125	ZA 1977-1225	19770301
GB 1544335	A	19790419	GB 1977-9205	19770304
BR 7701358	A	19771018	BR 1977-1358	19770307
JP 52109584	A	19770913	JP 1977-25855	19770309
FR 2343754	A1	19771007	FR 1977-7183	19770310
FR 2343754	B1	19800516		
US 4385164	A	19830524	US 1979-92595	19791108
PRIORITY APPLN. INFO.:			US 1976-665657	A 19760310
			US 1978-895906	A1 19780413

AB Block copolymers containing hydrophilic and hydrophobic blocks were prepared and used as stabilizers for the aqueous dispersion polymerization of ethylenically unsatd. monomers. Thus, a mixture of 0.077 g AIBN and 93.9 mL of a solution prepared from 780 mL benzene and 195 g polyethylene glycol monomethyl ether monomethacrylate [26915-72-0] was added slowly to a mixture of 1 mL glycidyl methacrylate, 200 mL benzene, 3.7 mL tert-butylstyrene, and 0.15 g AIBN, refluxed, cooled, treated with 0.347 g hydroquinone, 0.177 g triethylenediamine, and 0.63 mL methacrylic acid, and refluxed to prepare a block copolymer [64696-19-1] (number-average mol. weight 10,460) which was used as a stabilizer in the dispersion polymerization of vinyl acetate, acrylonitrile, Me methacrylate, butadiene, butadiene-styrene mixts., etc.
IC C08F002-20
CC 36-3 (Plastics Manufacture and Processing)
IT 52857-07-5 64696-14-6 64696-15-7 64696-16-8 64696-18-0 64696-19-1
RL: USES (Uses)
(block, dispersing agents, for polymns.)
IT 64696-16-8
RL: USES (Uses)
(block, dispersing agents, for polymns.)
RN 64696-16-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with 1-ethenyl-4-methylbenzene, α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

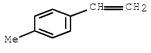
CRN 26915-72-0
CMF (C2 H4 O)n C5 H8 O2

CCI PMS



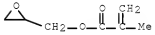
CM 2

CRN 622-97-9
CMF C9 H10



CM 3

CRN 106-91-2
CMF C7 H10 O3



CM 4

CRN 79-41-4
CMF C4 H6 O2

L180 ANSWER 34 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1976:137359 ZCAPLUS Full-text
DOCUMENT NUMBER: 84:137359
ORIGINAL REFERENCE NO.: 84:22343a,22346a
TITLE: Electron beam curable coating composition
INVENTOR(S): Kinstle, James F.
PATENT ASSIGNEE(S): Ford Motor Co., USA

SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3929935	A	19751230	US 1973-384522	19730806

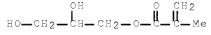
PRIORITY APPLN. INFO.: US 1973-384522 19730806

AB An acrylic acid-styrene copolymer 3-(methacryloyloxy)propyl ester [58740-17-3] coating was crosslinked by electron beams in the presence of 2-hydroxyethyl acrylate [818-61-1] to give a randomly textured or grained coating.

IC C08L; C09D
INCL 260885000
CC 42-10 (Coatings, Inks, and Related Products)
IT 54466-56-7
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, electron beam crosslinking of, in presence of hydroxyethyl acrylate)
IT 54466-56-7
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, electron beam crosslinking of, in presence of hydroxyethyl acrylate)
RN 54466-56-7 ZCAPLUS
CN 2-Propenoic acid, polymer with 2-propenoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

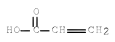
CRN 25085-34-1
CMF (C8 H8 . C3 H4 O2)x
CCI PMS

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-10-7
CMF C3 H4 O2



L180 ANSWER 35 OF 35 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1975:460337 ZCAPLUS Full-text
DOCUMENT NUMBER: 83:60337
ORIGINAL REFERENCE NO.: 83:9533a,9536a
TITLE: Addition polymerizable polymer
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd.
SOURCE: Ger. Offen., 49 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
DE 2166551	A1	19740711	DE 1971-2166551		19711224
DE 2166551	B2	19810507			
DE 2166551	C3	19820318			
JP 49034041	B	19740911	JP 1970-128473		19701226
JP 49017874	B	19740504	JP 1971-11702		19710306
JP 51006561	B	19760228	JP 1971-14385		19710317
US 3796578	A	19740312	US 1971-208690		19711216
AU 7137267	A	19730628	AU 1971-37267		19711223
GB 1376450	A	19741204	GB 1971-60021		19711223
CA 975495	A1	19750930	CA 1971-131013		19711223
FR 2123284	A5	19720908	FR 1971-46633		19711224
FR 2123284	B1	19730608			
IT 944377	B	19730420	IT 1971-32937		19711224
US 3953408	A	19760427	US 1973-407704		19731018
PRIORITY APPLN. INFO.:			JP 1970-128473	A	19701226
			JP 1971-11702	A	19710306
			JP 1971-11703	A	19710306
			JP 1971-14385	A	19710317
			US 1971-208690	A3	19711216

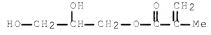
AB An acrylic acid-acrylonitrile-styrene copolymer (I), an acrylonitrile-ethyl acrylate-methacrylic acid-styrene copolymer, an acrylonitrile-butyl acrylate-ethyl H maleate-styrene copolymer, or 1 of 19 similar copolymers was esterified with glycidyl methacrylate (II), allyl glycidyl ether, or a similar compound and mixed with a light sensitizer and a crosslinking agent such as pentaerythritol tetramethacrylate (III) [3253-41-6] to give photocrosslinkable compns. used for preparing printing blocks which gave clear printing and were durable. Thus, a mixture of styrene 63, acrylonitrile 30, acrylic acid 7, and azobisisobutyronitrile 3 parts was added slowly to 100 parts iso-PrOH at 80° to prepare I, mixed at 60° with iso-PrOH 96, hydroquinone 0.3, and 40% methanolic PhCH2NMe3OH 3.75 parts, treated slowly at 80° with 30 parts II

containing 0.3 part hydroquinone to esterify 65% of the carboxyl groups, mixed (250 parts) with BuOH 1050, benzene 180, AcOEt 180, III 25, 1,2-benzanthraquinone 0.9, and benzoin Me ether 0.1 part, coated on Al, dried, exposed to a C arc lamp through a neg., washed with 1% Na2CO3 solution and water, dyed and coated with gum arabic to prepare a printing block for an offset press.

IC C08F
CC 36-3 (Plastics Manufacture and Processing)
    Section cross-reference(s): 74
IT 54465-32-6 54466-38-5 54466-44-3 54466-45-4 54466-46-5
    54466-48-7 54466-49-8 54466-51-2 54466-52-3 54466-55-6
    54466-56-7 54466-59-0
    RL: USES (Uses)
    (photocrosslinkable compns. containing, for printing plates)
IT 54466-56-7
    RL: USES (Uses)
    (photocrosslinkable compns. containing, for printing plates)
RN 54466-56-7 ZCAPLUS
CN 2-Propenoic acid, polymer with 2-propenoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

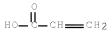
CRN 25085-34-1
CMF (C8 H8 . C3 H4 O2)x
CCI PMS

CM 3

CRN 100-42-5
CMF C8 H8

CM 4

CRN 79-10-7
CMF C3 H4 O2



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=>  file registry
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STRUCTURE FILE UPDATES:   30 MAR 2009  HIGHEST RN 1129871-47-1
DICTIONARY FILE UPDATES:  30 MAR 2009  HIGHEST RN 1129871-47-1

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Uploading L9.str
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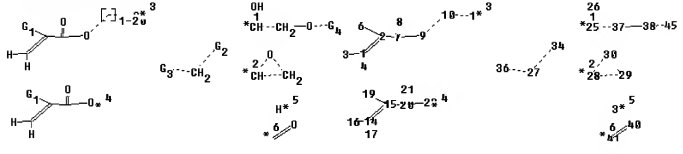

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chain nodes :
1  2  3  4  6  7  8  14  15  16  17  19  20  21  25  26  27  34  36  37  38  39
40  41  45
ring nodes :
28  29  30
ring/chain nodes :
9  10  11  22
chain bonds :
1-2  1-3  1-4  2-6  2-7  7-8  7-9  14-15  14-16  14-17  15-19  15-20  20-21  20-22
25-26  25-37  27-34  27-36  37-38  38-45  40-41
ring/chain bonds :
9-10  10-11
ring bonds :
28-30  28-29  29-30
exact/norm bonds :
2-6  7-8  7-9  9-10  10-11  15-19  20-21  20-22  25-26  25-37  27-34  27-36  28-30
28-29  29-30  38-45  40-41
exact bonds :
1-2  1-3  1-4  2-7  14-15  14-16  14-17  15-20  37-38
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G1:H,CH3

G2:[*1],[*2]

G3:[*3],[*4]

G4:[*5],[*6]

Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS  10:CLASS
11:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS  19:CLASS  20:CLASS  21:CLASS
22:CLASS  25:CLASS
26:CLASS  27:CLASS  28:Atom  29:Atom  30:Atom  34:CLASS  36:CLASS  37:CLASS
38:CLASS  39:CLASS
40:CLASS  41:CLASS  45:CLASS



Uploading L128.str
 ——S 2——1


chain nodes :
1
ring/chain nodes :
2
chain bonds :
1-2
exact bonds :
1-2


Hydrogen count :
1:= exact 1
Connectivity :
1:1 E exact RC ring/chain
Match level :
1:CLASS  2:CLASS




=> file zcaplus
FILE 'ZCAPLUS' ENTERED AT 14:43:26 ON 01 APR 2009
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FILE COVERS 1907 - 1 Apr 2009  VOL 150 ISS 14
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FILE LAST UPDATED: 31 Mar 2009 (20090331/ED)

ZCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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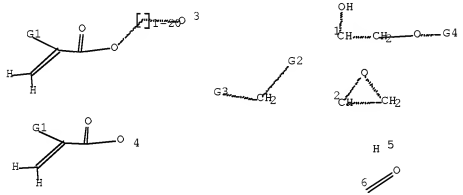
This file contains CAS Registry Numbers for easy and accurate substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

=> d stat que L157
L9 STR



G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

Structure attributes must be viewed using STN Express query preparation.
L11 26603 SEA FILE=REGISTRY SSS FUL L9
L128 STR

Structure attributes must be viewed using STN Express query preparation.
L130 821 SEA FILE=REGISTRY SUB=L11 SSS FUL L128
L152 473 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L130
L153 24646 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON OPTICAL FILTER?/BI
L154 11 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L152 AND L153
L155 18399 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON COLOR FILTER?/BI
L156 13 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L152 AND L155
L157 14 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L154 OR L156

=> s L157 not (L179 or L180)
L181 13 L157 NOT (L179 OR L180)

```
=> d ibib abs hitind hitstr L181 1-13

L181 ANSWER 1 OF 13  ZCAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:          2008:1243885  ZCAPLUS  Full-text
DOCUMENT NUMBER:           149:472487
TITLE:                     Curable resin composition, protective film for color
                           filter, and method for forming protective film
INVENTOR(S):               Fujioka, Masayasu; Iijima, Takahiro; Ueda, Jiro;
                           Hanamura, Masaaki; Yamauchi, Hideki; Tanimoto, Kanako
PATENT ASSIGNEE(S):        JSR Corporation, Japan
SOURCE:                    PCT Int. Appl., 111pp.
                           CODEN: PIXXD2
DOCUMENT TYPE:             Patent
LANGUAGE:                  Japanese
FAMILY ACC. NUM. COUNT:    1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     --------------      ----   --------    -------------------     --------
     WO 2008123388        A1    20081016    WO 2008-JP55994         20080321
         W:  AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
             CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:                       JP 2007-79859       A  20070326
AB   The composition comprises a polymer containing a polymerizable unsatd.
     compound having ≥1 functional group selected from an oxiranyl group, an
     oxetanyl group and an allyl group, and a siloxane oligomer for protective film
     of color filter, which contains a functional group crosslinkable with the
     polymer by heat.  The curable resin composition enables to form a cured film
     having high flatness even on a base having low surface flatness.  This curable
     resin composition is used for forming a protective film for optical devices,
     which has high transparency and high surface hardness, while being good in
     various resistances such as heat and pressure resistance, acid resistance,
     alkali resistance and sputtering resistance.
CC   38-3 (Plastics Fabrication and Uses)
     Section cross-reference(s): 73
ST   curable resin siloxane protective film color filter
IT   Polysiloxanes, uses
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (acrylic-epoxy; curable resin composition containing siloxane oligomer for
        protective film of color filter)
IT   Epoxy resins, uses
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (acrylic-polysiloxane-; curable resin composition containing siloxane
oligomer
        for protective film of color filter)
IT   Optical filters
     Polymerization catalysts
```

(curable resin composition containing siloxane oligomer for protective film of
color filter)
IT Polysiloxanes, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(di-Me, carboxy-containing, SF 8418, reaction products with epoxy resins, acrylates; curable resin composition containing siloxane oligomer for protective
film of color filter)
IT Silicone rubber, uses
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(epoxy-terminated, polymers with cyclohexylmaleimide, epoxy resins and acrylates; curable resin composition containing siloxane oligomer for protective
film of color filter)
IT Plastic films
(protective film; curable resin composition containing siloxane oligomer for
protective film of color filter)
IT 822-55-9, 5-Hydroxymethylimidazole 827-43-0, 2-Phenyl-4-methylimidazole 13750-62-4, 1-Benzyl-2-methylimidazole 37734-89-7
RL: CAT (Catalyst use); USES (Uses)
(curable resin composition containing siloxane oligomer for protective film of
color filter)
IT 25167-42-4P, Glycidyl methacrylate-styrene copolymer 26658-35-5P, Allyl methacrylate-styrene copolymer 86588-72-9P, uses 131650-27-6P 168269-79-2P 193804-38-5P 405297-65-6P, N-Cyclohexylmaleimide-glycidyl methacrylate-methacrylic acid-styrene-copolymer 760972-28-9P 900806-17-9P, N-Cyclohexylmaleimide-1-ethylcyclohexyl methacrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer 952180-79-9P 1071227-53-6P 1071227-54-7P 1071227-55-8P 1071227-56-9P 1071227-57-0P 1071227-58-1P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)
(curable resin composition containing siloxane oligomer for protective film of
color filter)
IT 79-41-4DP, Methacrylic acid, polymers with cyclohexylmaleimide, epoxy resins, acrylates and epoxy-terminated silicone rubber 96-05-9DP, Allyl methacrylate, reaction products with epoxy resins, acrylates and carboxy-containing siloxanes 100-42-5DP, Styrene, polymers with cyclohexylmaleimide, epoxy resins, acrylates and epoxy-terminated silicone rubber 106-91-2DP, Glycidyl methacrylate, polymers with cyclohexylmaleimide, epoxy resins, acrylates and epoxy-terminated silicone rubber 1631-25-0DP, N-Cyclohexylmaleimide, polymers with epoxy resins, acrylates and epoxy-terminated silicone rubber 1631-25-0DP, N-Cyclohexylmaleimide, reaction products with acrylates, epoxy resins and epoxy-terminated siloxanes 25068-38-6DP, Epikote 828, polymers with cyclohexylmaleimide, acrylates and epoxy-terminated silicone rubber 37674-57-0DP, 3-Ethyl-3-methacryloxymethyloxetane, reaction products with epoxy resins, acrylates and carboxy-containing siloxanes 77641-99-7DP, Kayarad DPHA, polymers with cyclohexylmaleimide, epoxy resins, acrylates and epoxy-terminated silicone rubber 266308-58-1DP, reaction products with cyclohexylmaleimide, acrylates, epoxy resins and epoxy-terminated siloxanes 1071227-59-2P, (3-Ethyloxetan-3-yl)propyltriethoxysilane-glycidyl methacrylate-hexahydrophthalic anhydride-phenyltrimethoxysilane-styrene copolymer 1071227-60-5P,

Diphenyldimethoxysilane-Epikote 828-2-(3,4-epoxycyclohexyl)ethyltrimethoxysilane-glycidyl methacrylate-styrene-trimellitic anhydride copolymer 1071227-61-6P, Epikote 828-glycidyl methacrylate-styrene-trimellitic anhydride-X 41-1056 copolymer 1071227-63-8P, Epikote 828-3-ethyl-3-methacryloxymethyloxetane-3-glycidoxypropyltrimethoxysilane-maleic anhydride-styrene-tetramethoxysilane copolymer 1071227-64-9P, N-Cyclohexylmaleimide-Epikote 828-glycidyl methacrylate-maleic anhydride-methyltrimethoxysilane-3-mercaptopropyltrimethoxysilane-styrene copolymer 1071227-65-0P, Diphenyldimethoxysilane-Epikote 828-2-(3,4-epoxycyclohexyl)ethyltrimethoxysilane-glycidyl methacrylate-hexahydrophthalic anhydride-styrene-tricyclo[5.2.1.02,6]decan-8-ol methacrylate copolymer 1071227-66-1P, N-Cyclohexylmaleimide-Epikote 828-(3-ethyloxetan-3-yl)propyltriethoxysilane-glycidyl methacrylate-Kayarad DPHA-methacrylic acid-phenyltrimethoxysilane-styrene copolymer 1071227-67-2P, Allyl methacrylate-dimethyldimethoxysilane-Epikote 828-3-methacryloxypropylmethyldiethoxysilane-styrene copolymer 1071227-68-3P, Acryloxypropylmethyldiethoxysilane-allyl methacrylate-Epikote 154-glycidyl methacrylate-methyltrimethoxysilane-styrene copolymer 1071227-69-4P, (3-Acryloyloxypropyl)diethoxymethylsilane-allyl methacrylate-Epikote 828-3-ethyl-3-methacryloxymethyloxetane-methyltrimethoxysilane-styrene copolymer 1071227-71-8P, Dimethyldimethoxysilane-Epikote 828-3-ethyl-3-methacryloxymethyloxetane-3-methacryloxypropylmethyldiethoxysilane-glycidyl methacrylate-styrene copolymer 1071227-72-9P, Allyl methacrylate-N-cyclohexylmaleimide-dimethyldimethoxysilane-Epikote 828-3-methacryloxypropylmethyldiethoxysilane-styrene copolymer 1071227-73-0P, N-Cyclohexylmaleimide-dipentaerythritol pentaacrylate hydrogen succinate-diphenyldimethoxysilane-Epikote 828-2-(3,4-epoxycyclohexyl)ethyltrimethoxysilane-1-ethylcyclohexyl methacrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer 1071227-74-1P, N-Cyclohexylmaleimide-diphenyldimethoxysilane-Epikote 828-2-(3,4-epoxycyclohexyl)ethyltrimethoxysilane-1-ethylcyclopentyl methacrylate-glycidyl methacrylate-Kayarad DPHA-methacrylic acid-styrene copolymer 1071227-77-4P, N-Cyclohexylmaleimide-Epikote 828-3-glycidoxypropyltrimethoxysilane-glycidyl methacrylate-Kayarad DPHA-methacrylic acid-styrene-tetrahydro-2H-pyran-2-yl methacrylate-tetramethoxysilane copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(curable resin composition containing siloxane oligomer for protective film of color filter)

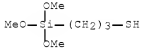
IT 104814-61-1P, 3-Glycidoxypropyltrimethoxysilane-tetramethoxysilane copolymer 168269-75-8P, Diphenyldimethoxysilane-2-(3,4-epoxycyclohexyl)ethyltrimethoxysilane copolymer 1046488-14-5P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP (Preparation); USES (Uses)
(oligomer; curable resin composition containing siloxane oligomer for protective film of color filter)

IT 1071227-64-9P, N-Cyclohexylmaleimide-Epikote 828-glycidyl methacrylate-maleic anhydride-methyltrimethoxysilane-3-mercaptopropyltrimethoxysilane-styrene copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(curable resin composition containing siloxane oligomer for protective film

of
color filter)
RN 1071227-64-9 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with 2-(chloromethyl)oxirane, 1-cyclohexyl-1H-pyrrole-2,5-dione, ethenylbenzene, 2,5-furandione, 4,4'-(1-methylethylidene)bis[phenol], trimethoxymethylsilane and 3-(trimethoxysilyl)-1-propanethiol (CA INDEX NAME)

CM 1

CRN 4420-74-0
CMF C6 H16 O3 S Si



CM 2

CRN 1631-25-0
CMF C10 H13 N O2

CM 3

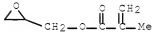
CRN 1185-55-3
CMF C4 H12 O3 Si

CM 4

CRN 108-31-6
CMF C4 H2 O3

CM 5

CRN 106-91-2
CMF C7 H10 O3



CM 6

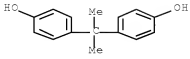
CRN 106-89-8
CMF C3 H5 Cl O

CM 7

CRN 100-42-5
CMF C8 H8

CM 8

CRN 80-05-7
CMF C15 H16 O2



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L181 ANSWER 2 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1098192 ZCAPLUS Full-text
DOCUMENT NUMBER: 149:366513
TITLE: High-pigment-content jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents and liquid crystal display color filters equipped with their layers
INVENTOR(S): Nogami, Takayuki; Inagaki, Hiroshi; Ikegami, Tomonori; Tanaka, Yoshikazu; Hiroshima, Tsutomu; Nakazato, Mutsumi
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 65pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 2008208340	A	20080911	JP 2008-5058		20080111
PRIORITY APPLN. INFO.:			JP 2007-23628	A	20070202

AB Title inks comprise resin dispersing agents, which are manufactured by radical polymerization of ethylenically unsatd. monomers in the presence of compds. containing 2 hydroxy and a thiol and esterification of hydroxy at one ends the resulting vinyl polymers with tetracarboxylic anhydrides, pigments, thermally reactive compds., and organic solvents. The resin dispersing agents may be manufactured by radical polymerization of ethylenically unsatd. monomers in the presence of compds. prepared from tetracarboxylic anhydrides and compds. containing 2 hydroxy and a thiol. Because of the dispersing agents, the inks show good chemical resistance and high storage ejection and stability.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 42

ST mercaptopropanediol pyromellitate benzyl methacrylate graft dispersing agent; high pigment content jet printing ink; storage stability color filter jet printing ink; liq crystal display chem resistance ink

IT Polyesters, preparation
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(acrylic, block, graft, pigment dispersing agents; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)

IT Polyesters, preparation
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(acrylic, graft, pigment dispersing agents; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin

dispersing agents for liquid crystal display color filters)
IT Polyethers, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT Polyurethanes, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aminoplast-; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT Epoxy resins, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aminoplast; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT Polyesters, preparation
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(carboxy-terminated, pigment dispersing agents; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT Binders
Chemically resistant materials
Liquid crystal displays
Optical filters
Pigments, nonbiological
(chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT Aminoplasts
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT Aminoplasts
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(epoxy; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT Inks
(jet-printing; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT Polyurethanes, preparation
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(polyester-, pigment dispersing agents; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents

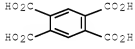
for
liquid crystal display color filters)
IT Isocyanates
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polymers; chemical resistant jet-printing inks containing pendant carboxylic
acid-containing resin dispersing agents for liquid crystal display color filters)
IT Aminoplasts
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane-; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display
color filters)
IT Plastics, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(thermoplastics, bidders; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal
display color filters)
IT 147-14-8, (Phthalocyaninato)copper
RL: TEM (Technical or engineered material use); USES (Uses)
(C.I. Pigment Blue 15:6, C.I. Pigment Blue 15:3; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT 9003-08-1, Melamine resin
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(Nikalac MX 43, Nikalac MX 417; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid
crystal display color filters)
IT 91-76-9D, Benzoguanamine, polymers
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(alkoxyalkyl group-containing; chemical resistant jet-printing inks containing
pendant carboxylic acid-containing resin dispersing agents for liquid crystal
display color filters)
IT 88583-06-6P, Aronix M 400 homopolymer 1055888-40-8P, EPPN 201-Nikalac MX 417 copolymer 1055888-44-2P, Desmodur BL 4265-Nikalac MX 417 copolymer 1055888-46-4P, EPPN 201-Nikalac SB 401 copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT 945622-86-6P, Benzyl methacrylate-N-hydroxyethylacrylamide-isobutyl methacrylate-lauryl methacrylate-methyl methacrylate copolymer 948592-27-6P, Benzyl methacrylate-2-ethylhexyl methacrylate-2-hydroxyethyl methacrylate copolymer
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display

color filters)
IT 26160-89-4, Nikalac BL 60 865779-80-2, Nikalac SB 401
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT 980-26-7, C.I. Pigment Red 122 5281-04-9, C.I. Pigment Red 57:1 14302-13-7, C.I. Pigment Green 36 30125-47-4, C.I. Pigment Yellow 138 84632-65-5, C.I. Pigment Red 254 215247-95-3, C.I. Pigment Violet 23
RL: TEM (Technical or engineered material use); USES (Uses)
(chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT 84-65-1D, Anthraquinone, derivs. 68324-29-8D, derivs. 442526-47-8D, derivs. 442532-87-8D, derivs. 544481-42-7D, derivs. 574748-95-1D, derivs. 639823-53-3
RL: TEM (Technical or engineered material use); USES (Uses)
(pigment derivative; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT 89-32-7DP, Pyromellitic dianhydride, esters with polymers 56743-27-2DP, Dimethylolbutanoic acid, reaction products with polyester-polyurethanes and esters with pyromellitic dianhydride 90651-35-7DP, Vestanat T 1890/100, polymers with polyester monools, reaction products with dimethylolbutanoic acid, and reaction products with pyromellitic dianhydride 104673-46-3DP, polymers with polyisocynanates, reaction products with dimethylol butanoic acid, and reaction products with pyromellitic dianhydride 105009-20-9DP, polymers with polyisocynanates, reaction products with dimethylol butanoic acid, and reaction products with pyromellitic dianhydride 863672-11-1P 919990-16-2P 938076-68-7P, Benzyl methacrylate-butyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-Phosmer M copolymer 945622-87-7P 948828-93-1P 1055888-17-9P, Benzyl methacrylate-butyl methacrylate-3-mercapto-1,2-propanediol-pyromellitic anhydride graft copolymer 1055888-21-5P, Benzyl methacrylate-3,3',4,4'-biphenyl ether tetracarboxylic dianhydride-butyl methacrylate-3-mercapto-1,2-propanediol graft copolymer 1055888-30-6P, Benzyl methacrylate-butyl acrylate-2-hydroxypropyl methacrylate-3-mercapto-1,2-propanediol-methyl methacrylate-neopentyl glycol-pyromellitic dianhydride block graft copolymer 1055888-32-8P, Benzyl methacrylate-butyl acrylate-tert-butyl methacrylate-2-hydroxypropyl methacrylate-3-mercapto-1,2-propanediol-methyl methacrylate-neopentyl glycol-pyromellitic dianhydride block graft copolymer 1055888-38-4P, Benzyl methacrylate-butyl acrylate-2-hydroxypropyl methacrylate-3-mercapto-1,2-propanediol-methyl methacrylate-pyromellitic dianhydride graft copolymer 1055909-28-8P 1055909-31-3P 1055909-35-7P 1055909-41-5P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(pigment dispersing agent; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal display color filters)
IT 189120-90-9, Disperbyk 111
RL: MOA (Modifier or additive use); USES (Uses)
(pigment dispersing agent; chemical resistant jet-printing inks containing pendant carboxylic acid-containing resin dispersing agents for liquid crystal

display color filters)
IT 102-76-1, Triacetin 112-15-2, Diethylene glycol monoethyl ether acetate
124-17-4, Diethylene glycol monobutyl ether acetate 25498-49-1,
Tripropylene glycol monomethyl ether 55934-93-5, Tripropylene glycol
monobutyl ether
RL: TEM (Technical or engineered material use); USES (Uses)
(solvent; chemical resistant jet-printing inks containing pendant
carboxylic
acid-containing resin dispersing agents for liquid crystal display
color filters)
IT 1055909-41-5P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP
(Preparation); USES (Uses)
(pigment dispersing agent; chemical resistant jet-printing inks containing
pendant carboxylic acid-containing resin dispersing agents for liquid
crystal
display color filters)
RN 1055909-41-5 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, telomer with butyl
2-propenoate, 3-mercapto-1,2-propanediol and phenylmethyl
2-methyl-2-propenoate, dihydrogen 1,2,4,5-benzenetetracarboxylate
2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 89-05-4
CMF C10 H6 O8



CM 2

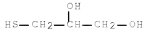
CRN 79-41-4
CMF C4 H6 O2

CM 3

CRN 1055909-40-4
CMF (C11 H12 O2 . C7 H12 O2 . C7 H10 O3)x . C3 H8 O2 S

CM 4

CRN 96-27-5
CMF C3 H8 O2 S

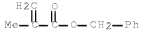


CM 5

CRN 1055909-39-1
CMF (C11 H12 O2 . C7 H12 O2 . C7 H10 O3)x
CCI PMS

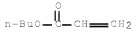
CM 6

CRN 2495-37-6
CMF C11 H12 O2



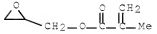
CM 7

CRN 141-32-2
CMF C7 H12 O2



CM 8

CRN 106-91-2
CMF C7 H10 O3



L181 ANSWER 3 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:939730 ZCAPLUS Full-text
DOCUMENT NUMBER: 149:226052
TITLE: Nonaqueous pigment dispersion compositions with

excellent heat resistance
INVENTOR(S): Ishikawa, Kazuhiro; Kuwahara, Kazuo; Nanbu, Hiromi
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008179750	A	20080807	JP 2007-36200	20070216
PRIORITY APPLN. INFO.:			JP 2006-352711 A	20061227

AB Title compns., useful for color filter inks, etc., comprise (A) pigments, (B) nonaq. solvents, and (C) polymers having main chains containing units derived from monomers with solubility parameter [SP; (cal/cm3)1/2] ≤10.0 and graft chains of polymer chains containing N-containing polymer-derived units and polymer chains containing N-free polymer-derived units. Thus, one-end-methacryloyl poly(2-ethyloxazoline) 5, one-end-methacryloyl PMMA 35, and 2-(perfluorooctyl)ethyl methacrylate (FMA) 10 g were polymerized in PhMe in the presence of 2,2'-azobis(2,4-dimethylvaleronitrile) to give a graft copolymer, 10 parts of which was mixed with 10 parts C.I. Pigment Red 254 (Irgaphor BT-CF) and 80 parts propylene glycol mono-Me ether acetate and dispersed by using zirconia beads to give a pigment dispersion. It was diluted to pigment concentration 5% and mixed 2.00:0.15:0.046:0.035:0.15 with 40% methacrylic acid-benzyl methacrylate copolymer solution, dipentaerythritol hexaacrylate (DPHA), 2-methyl-4'-(methylthio)-2-morpholinopropiophenone, and propylene glycol mono-Me ether acetate to give a nonaq. pigment dispersion composition showing volume median diameter 73 nm and no crystal separation in its cured film.

CC 42-10 (Coatings, Inks, and Related Products)

IT 2867-47-2DP, N,N-Dimethylaminoethyl methacrylate, reaction products with poly(ethyloxazoline) 25805-17-8DP, Poly(2-ethyloxazoline), methacryloyl-terminated 69488-61-5DP, methacryloyl-terminated 112955-56-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomer; nonaq. pigment dispersion compns. with good heat resistance)

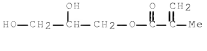
IT 112955-56-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomer; nonaq. pigment dispersion compns. with good heat resistance)

RN 112955-56-3 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, telomer with 3-mercaptopropanoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

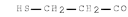


CM 2

CRN 102685-69-8
CMF (C5 H8 O2)x . C3 H6 O2 S

CM 3

CRN 107-96-0
CMF C3 H6 O2 S



CM 4

CRN 9011-14-7
CMF (C5 H8 O2)x
CCI PMS

CM 5

CRN 80-62-6
CMF C5 H8 O2

L181 ANSWER 4 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:829404 ZCAPLUS Full-text
DOCUMENT NUMBER: 149:154869
TITLE: Manufacture of nonaqueous pigment dispersions and color compositions containing them for color filters
INVENTOR(S): Sakuma, Yasumitsu; Matsumoto, Toshiyuki
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008156466	A	20080710	JP 2006-346471	20061222

PRIORITY APPLN. INFO.: JP 2006-346471 20061222

AB Title manufacture involves (1) mixing pigment compns. containing polymer dispersants and organic solvents and predispersing them, (2) dispersing the predispersions by a media disperser using media particles with particle size

≤0.1 mm, and (3) further dispersing by a homogenizer. Thus, polymerizing Me methacrylate in propylene glycol monomethyl ether acetate (I) in the presence of 3-mercaptopropionic acid, esterifying the resulting polymer with glycidyl methacrylate, and grafting 12.8 parts N-vinyl-2-pyrrolidone and 14.7 parts 2-hydroxyethyl methacrylate with 72.5 parts of the resulting macromer gave a 40% solid dispersant solution Then, 10 parts pigments (Irgaphor BT-CF) was stirred in I containing 6 parts dispersant, dispersed by using zirconia beads (particle size 0.2 mm), further dispersed by using zirconia beads (particle size 0.05 mm), and then microfluidized to give a pigment dispersion showing D50 70.6 nm, D90 119.2 nm, low viscosity, and good storage stability.

CC 42-6 (Coatings, Inks, and Related Products)
Section cross-reference(s): 74

IT Optical filters
(manufacture of nonaq. fine pigment dispersions with low viscosity and good storage stability for)

IT 121287-82-9P 1036847-96-7P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(dispersant; manufacture of nonaq. fine pigment dispersions with low viscosity and good storage stability)

IT 112955-56-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomer; manufacture of nonaq. fine pigment dispersions with low viscosity and good storage stability)

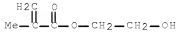
IT 1036847-96-7P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(dispersant; manufacture of nonaq. fine pigment dispersions with low viscosity and good storage stability)

RN 1036847-96-7 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 3-mercaptopropanoic acid telomer with methyl 2-methyl-2-propenoate 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester, graft (CA INDEX NAME)

CM 1

CRN 868-77-9
CMF C6 H10 O3



CM 2

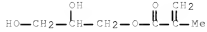
CRN 88-12-0
CMF C6 H9 N O

CM 3

CRN 112955-56-3
CMF C7 H12 O4 . x (C5 H8 O2)x . x C3 H6 O2 S

CM 4

CRN 5919-74-4
CMF C7 H12 O4

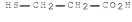


CM 5

CRN 102685-69-8
CMF (C5 H8 O2)x . C3 H6 O2 S

CM 6

CRN 107-96-0
CMF C3 H6 O2 S



CM 7

CRN 9011-14-7
CMF (C5 H8 O2)x
CCI PMS

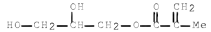
CM 8

CRN 80-62-6
CMF C5 H8 O2

IT 112955-56-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomer; manufacture of nonaq. fine pigment dispersions with low viscosity and good storage stability)
RN 112955-56-3 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, telomer with 3-mercaptopropanoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

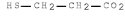


CM 2

CRN 102685-69-8
CMF (C5 H8 O2)x . C3 H6 O2 S

CM 3

CRN 107-96-0
CMF C3 H6 O2 S



CM 4

CRN 9011-14-7
CMF (C5 H8 O2)x
CCI PMS

CM 5

CRN 80-62-6
CMF C5 H8 O2

L181 ANSWER 5 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:411293 ZCAPLUS Full-text
DOCUMENT NUMBER: 148:437504
TITLE: Liquid crystalline compositions, their optically compensating color filters, manufacture of color filters, and LCD
INVENTOR(S): Takeuchi, Hiroshi; Ichihashi, Mitsuyoshi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008074995	A	20080403	JP 2006-256998	20060922
PRIORITY APPLN. INFO.:			JP 2006-256998	20060922

GI

I II

AB The liquid crystalline compns. contain (A) pigment dispersing agents containing structure units represented by [CH2CR1[XL1(AL3)nBL2R2]] (I) or II [in I and II; R1 = H, Me; X, L1, L2 = single bond, divalent linkage; A, B = 1,4-phenylene whose 1 or 2 CH may be replaced by N, 1,4-cyclohexylene whose 1 CH2 or 2 non-adjacent CH2 may be replaced by O; L3 = single bond, CO2, O2C, (CH2)2, CH2O, OCH2, CH:CH, C.tplbond.C, or combination of of ≥2 of these; n = 1-3 integer; R2 = C≤15 alkyl whose ≥1 of CH2 may be replaced by O, S, CO, CO2, O2C, OCO2 (each oxygen does not link directly with each other); when n = 2 or 3, 2 or 3 of groups AL3 may be the same or different from each other], (B) pigments, and (C) liquid crystalline compds. The pigments may be organic pigments for color filters. The color filters are manufactured by disposing the compns. on a surface, followed by aligning of the liquid crystalline compds. mols. and fixing the alignment thereon. The LCD has the color filer.
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST liq cryst compn org pigment polymeric dispersing agent; optically compensating color filter liq crystal display
IT Dispersing agents
Liquid crystal displays
Optical filters
(liquid crystalline compns. containing organic pigments and polymeric dispersing
agents for manufacture of optically compensating color filters for LCD)

IT Optical instruments
(retarders; liquid crystalline compns. containing organic pigments and polymeric
dispersing agents for manufacture of optically compensating color filters for LCD)
IT 57592-66-2P, Pentaerythritol tetraacrylate homopolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(crosslinked, color filter; liquid crystalline compns. containing organic pigments and polymeric dispersing agents for manufacture of optically compensating color filters for LCD)
IT 1016942-83-8P 1016942-92-9P 1016969-74-6P
1016969-75-7P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(liquid crystalline compns. containing organic pigments and polymeric dispersing agents for manufacture of optically compensating color filters for LCD)
IT 1016942-59-8P 1016942-68-9P 1016969-45-1P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(liquid crystalline compns. containing organic pigments and polymeric dispersing agents for manufacture of optically compensating color filters for LCD)
IT 14302-13-7, C.I. Pigment Green 36 30125-47-4, C.I. Pigment Yellow 138
RL: MOA (Modifier or additive use); USES (Uses)
(liquid crystalline compns. containing organic pigments and polymeric dispersing agents for manufacture of optically compensating color filters for LCD)
IT 1083-27-8, Hexyl 4-hydroxybenzoate 303009-51-0,
4-(4-Acryloyloxybutoxy)benzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(liquid crystalline compns. containing organic pigments and polymeric dispersing agents for manufacture of optically compensating color filters for LCD)
IT 187585-64-4
RL: TEM (Technical or engineered material use); USES (Uses)
(liquid crystalline compns. containing organic pigments and polymeric dispersing agents for manufacture of optically compensating color filters for LCD)
IT 1016969-74-6P 1016969-75-7P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(liquid crystalline compns. containing organic pigments and polymeric dispersing agents for manufacture of optically compensating color filters for LCD)
RN 1016969-74-6 ZCAPLUS
CN Benzoic acid, 4-[4-[(1-oxo-2-propen-1-yl)oxy]butoxy]-, 4-[(hexyloxy)carbonyl]phenyl ester, telomer with 3-mercaptopropanoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester, polymer with N-[3-(dimethylamino)propyl]-2-propenamide, graft (CA INDEX NAME)

CM 1

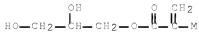
CRN 3845-76-9
CMF C8 H16 N2 O

CM 2

CRN 1016969-45-1
CMF (C27 H32 O7)x . x C7 H12 O4 . C3 H6 O2 S

CM 3

CRN 5919-74-4
CMF C7 H12 O4

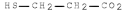


CM 4

CRN 1016942-68-9
CMF (C27 H32 O7)x . C3 H6 O2 S

CM 5

CRN 107-96-0
CMF C3 H6 O2 S

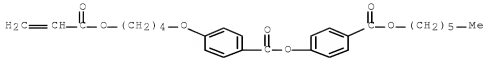


CM 6

CRN 1016942-67-8
CMF (C27 H32 O7)x
CCI PMS

CM 7

CRN 1016942-59-8
CMF C27 H32 O7

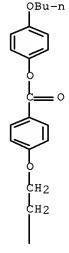


RN 1016969-75-7 ZCAPLUS
CN Benzoic acid, 4-[2-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)ethoxy]-, 4-butoxyphenyl ester, polymer with N-[3-(dimethylamino)propyl]-2-propenamide and ethyl 2-methyl-2-propenoate telomer with 3-mercaptopropanoic acid 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 1016942-91-8
CMF C23 H23 N O6

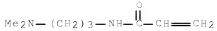
PAGE 1-A



PAGE 2-A

CM 2

CRN 3845-76-9
CMF C8 H16 N2 O

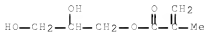


CM 3

CRN 139104-88-4
CMF C7 H12 O4 . x (C6 H10 O2)x . x C3 H6 O2 S

CM 4

CRN 5919-74-4
CMF C7 H12 O4

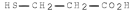


CM 5

CRN 127939-26-8
CMF (C6 H10 O2)x . C3 H6 O2 S

CM 6

CRN 107-96-0
CMF C3 H6 O2 S



CM 7

CRN 9003-42-3
CMF (C6 H10 O2)x
CCI PMS

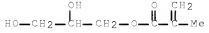
CM 8

CRN 97-63-2
CMF C6 H10 O2

IT 1016969-45-1P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(liquid crystalline compns. containing organic pigments and polymeric dispersing
agents for manufacture of optically compensating color filters for LCD)
RN 1016969-45-1 ZCAPLUS
CN Benzoic acid, 4-[4-[(1-oxo-2-propen-1-yl)oxy]butoxy]-, 4-[(hexyloxy)carbonyl]phenyl ester, telomer with 3-mercaptopropanoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propen-1-yl)oxy]propyl ester (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

CRN 1016942-68-9
CMF (C27 H32 O7)x . C3 H6 O2 S

CM 3

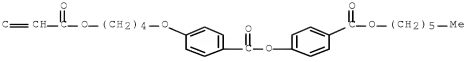
CRN 107-96-0
CMF C3 H6 O2 S

CM 4

CRN 1016942-67-8
CMF (C27 H32 O7)x
CCI PMS

CM 5

CRN 1016942-59-8
CMF C27 H32 O7



L181 ANSWER 6 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:693998 ZCAPLUS Full-text
DOCUMENT NUMBER: 139:237731
TITLE: Image-forming materials and image formation using them
INVENTOR(S): Takahashi, Hidetomo; Hatakeyama, Akira; Goto, Yasutomo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003248321	A	20030905	JP 2002-48536	20020225
JP 4012745	B2	20071121		
PRIORITY APPLN. INFO.:			JP 2002-48536	20020225

AB The materials contain polymers obtained by polymerization of macromononers. The materials may be photosensitive transfer materials. Images are formed by laminating the materials on substrates, imagewise exposing, and developing. The materials are useful for manufacture of printed circuit boards, lithog. plates, stencils, LCD color filters, etc. The materials show good transferability, fixability, and offset property because of rapid change in melt viscosity by temperature change.

IC ICM G03F007-11
ICS C08F299-00; C08L101-00; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photosensitive transfer material macromonomer comblike polymer; color filter manuf photosensitive transfer material

IT Optical filters
Transfer printing
(photosensitive transfer materials containing macromonomer polymers for image formation)

IT 26355-01-1DP, 2-Hydroxyethyl methacrylate-methyl methacrylate copolymer, methacryloyl-terminated, polymer 591766-66-4P 591766-67-5P 591767-68-9P, Methyl methacrylate-thioglycolic acid telomer, ester with glycidyl methacrylate, homopolymer 591767-69-0P, AA 714SK homopolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(comblike; photosensitive transfer materials containing macromonomer polymers for image formation)

IT 96595-56-1P, Methyl methacrylate-thioglycolic acid telomer, ester with glycidyl methacrylate
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(oligomeric; photosensitive transfer materials containing macromonomer polymers for image formation)

IT 591767-68-9P, Methyl methacrylate-thioglycolic acid telomer, ester with glycidyl methacrylate, homopolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(comblike; photosensitive transfer materials containing macromonomer polymers for image formation)

RN 591767-68-9 ZCAPLUS

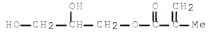
CN 2-Propenoic acid, 2-methyl-, methyl ester, telomer with mercaptoacetic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 96595-56-1
CMF C7 H12 O4 . x (C5 H8 O2)x . x C2 H4 O2 S

CM 2

CRN 5919-74-4
CMF C7 H12 O4

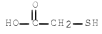


CM 3

CRN 67076-30-6
CMF (C5 H8 O2)x . C2 H4 O2 S

CM 4

CRN 68-11-1
CMF C2 H4 O2 S



CM 5

CRN 9011-14-7
CMF (C5 H8 O2)x
CCI PMS

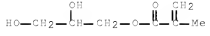
CM 6

CRN 80-62-6
CMF C5 H8 O2

IT 96595-56-1P, Methyl methacrylate-thioglycolic acid telomer, ester with glycidyl methacrylate
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(oligomeric; photosensitive transfer materials containing macromonomer polymers for image formation)
RN 96595-56-1 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, telomer with mercaptoacetic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

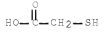


CM 2

CRN 67076-30-6
CMF (C5 H8 O2)x . C2 H4 O2 S

CM 3

CRN 68-11-1
CMF C2 H4 O2 S



CM 4

CRN 9011-14-7
CMF (C5 H8 O2)x
CCI PMS

CM 5

CRN 80-62-6
CMF C5 H8 O2

L181 ANSWER 7 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:673950 ZCAPLUS Full-text
DOCUMENT NUMBER: 139:205121
TITLE: Pigmented photoimaging resin compositions for color filters, pigment dispersions therefor, and dispersants therein
INVENTOR(S): Takahashi, Hidetomo; Ikeda, Kenji; Takeda, Akihiko; Komori, Eri
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003238837	A	20030827	JP 2002-36369	20020214
JP 4064681	B2	20080319		
PRIORITY APPLN. INFO.:			JP 2002-36369	20020214

AB The compns., showing excellent dispersion of pigments and good alkali developability, contain monomers bearing ≥2 ethylenically unsatd. groups, photopolymn. initiators, optional acid group-containing binder polymers, and pigment dispersions containing dispersants which comprise graft copolymers having segments of organic dyes (e.g., benzimidazolone, quinaldine, and/or quinophthalone) in backbones and acid groups in backbones and/or in graft chains. Color filters obtained from the compns. show high contrast.
IC ICM C09B067-20
ICS B01F017-52; C08F290-04; C08F299-00
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 41, 73
ST LCD color filter photoimaging pigment dispersant; benzimidazolone derived pigment dispersant color filter; alkali developability dispersion color filter photoimaging material
IT Liquid crystal displays
(color; dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)
IT Dispersing agents
(dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)
IT Macromonomers
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)
IT Photoimaging materials
(photopolymerizable; dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)

IT 80-62-6DP, Methyl methacrylate, polymers with dye segment-containing acrylic monomers and carboxyl-containing macromonomers 491609-75-7DP, polymers with Me methacrylate and carboxyl-containing macromonomers 582309-53-3P 582309-54-4P 582309-55-5P 582309-56-6P 582309-57-7P 582309-58-8P 582309-59-9P 582309-60-2P 582318-68-1P, 2-Hydroxyethyl methacrylate-methyl methacrylate-thioglycolic acid telomer, ester with glycidyl methacrylate and succinic anhydride, graft copolymer with Macromonomer AA 6 and M1 582318-69-2P, 2-Hydroxyethyl methacrylate-methyl methacrylate copolymer succinate-M1 graft copolymer 582318-70-5P, AA 714SK succinate-methyl methacrylate-M 1 graft copolymer 582318-71-6P, AA 714SK succinate-methacrylic acid-methyl methacrylate-M 1 graft copolymer 582318-73-8P, 2-Hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate copolymer succinate-M1 graft copolymer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dispersing agents; dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)

IT 5263-98-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)

IT 79-41-4, Methacrylic acid, reactions 85-44-9, Phthalic anhydride 95-23-8 627-18-9 826-81-3, 8-Hydroxyquinaldine 1888-94-4, 2-Chloroethyl methacrylate 30674-80-7, 2-Isocyanatoethyl methacrylate
RL: RCT (Reactant); RACT (Reactant or reagent)
(dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)

IT 147-14-8, C.I. Pigment Blue 15:6 14302-13-7, C.I. Pigment Green 36 30125-47-4, C.I. Pigment Yellow 138 65697-21-4, Benzyl methacrylate-methacrylic acid copolymer 84632-65-5, C.I. Pigment Red 254
RL: TEM (Technical or engineered material use); USES (Uses)
(dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)

IT 582318-63-6P, 2-Hydroxyethyl methacrylate-methyl methacrylate-thioglycolic acid telomer ester with glycidyl methacrylate and succinic anhydride 582318-65-8DP, Methoxymethyl methacrylate-methyl methacrylate-thioglycolic acid telomer glycidyl methacrylate ester, hydrolyzed 582318-66-9P, AA 714SK succinic anhydride ester 582318-67-0DP, 2-Hydroxyethyl methacrylate-methyl methacrylate copolymer hydrogen succinate, methacryloyl-terminated
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomers; dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)

IT 491609-75-7P 491609-76-8P 491609-77-9P 582309-52-2P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomers; dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)

IT 115168-59-7
RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)
(photopolymn. initiators; dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)

IT 582318-68-1P, 2-Hydroxyethyl methacrylate-methyl methacrylate-thioglycolic acid telomer, ester with glycidyl methacrylate

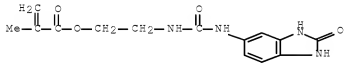
and succinic anhydride, graft copolymer with Macromonomer AA 6 and M1
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)
(dispersing agents; dye segment-containing graft copolymers as pigment
dispersants in photoimaging compns. for LCD color
filters)

RN 582318-68-1 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]carbonyl]amino]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate telomer with mercaptoacetic acid and methyl 2-methyl-2-propenoate hydrogen butanedioate 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, and Macromonomer AA 6 (9CI) (CA INDEX NAME)

CM 1

CRN 491609-75-7
CMF C14 H16 N4 O4



CM 2

CRN 122525-04-6
CMF Unspecified
CCI PMS, MAN

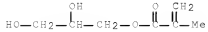
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 582318-63-6
CMF C7 H12 O4 . x (C6 H10 O3 . C5 H8 O2)x . x C4 H6 O4 . x C2 H4 O2 S

CM 4

CRN 5919-74-4
CMF C7 H12 O4



CM 5

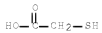
CRN 110-15-6
CMF C4 H6 O4

CM 6

CRN 139957-50-9
CMF (C6 H10 O3 . C5 H8 O2)x . C2 H4 O2 S

CM 7

CRN 68-11-1
CMF C2 H4 O2 S

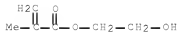


CM 8

CRN 26355-01-1
CMF (C6 H10 O3 . C5 H8 O2)x
CCI PMS

CM 9

CRN 868-77-9
CMF C6 H10 O3



CM 10

CRN 80-62-6
CMF C5 H8 O2

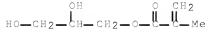
IT 582318-63-6P, 2-Hydroxyethyl methacrylate-methyl methacrylate-thioglycolic acid telomer ester with glycidyl methacrylate

and succinic anhydride 582318-65-8DP, Methoxymethyl methacrylate-methyl methacrylate-thioglycolic acid telomer glycidyl methacrylate ester, hydrolyzed
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomers; dye segment-containing graft copolymers as pigment dispersants in photoimaging compns. for LCD color filters)

RN 582318-63-6 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, telomer with mercaptoacetic acid and methyl 2-methyl-2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, hydrogen butanedioate (9CI) (CA INDEX NAME)

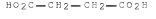
CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

CRN 110-15-6
CMF C4 H6 O4

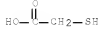


CM 3

CRN 139957-50-9
CMF (C6 H10 O3 . C5 H8 O2)x . C2 H4 O2 S

CM 4

CRN 68-11-1
CMF C2 H4 O2 S

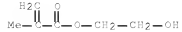


CM 5

CRN 26355-01-1
CMF (C6 H10 O3 . C5 H8 O2)x
CCI PMS

CM 6

CRN 868-77-9
CMF C6 H10 O3



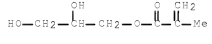
CM 7

CRN 80-62-6
CMF C5 H8 O2

RN 582318-65-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, methoxymethyl ester, telomer with mercaptoacetic acid and methyl 2-methyl-2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

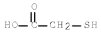


CM 2

CRN 582318-64-7
CMF (C6 H10 O3 . C5 H8 O2)x . C2 H4 O2 S

CM 3

CRN 68-11-1
CMF C2 H4 O2 S

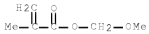


CM 4

CRN 87211-36-7
CMF (C6 H10 O3 . C5 H8 O2)x
CCI PMS

CM 5

CRN 20363-82-0
CMF C6 H10 O3



CM 6

CRN 80-62-6
CMF C5 H8 O2

L181 ANSWER 8 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:671228 ZCAPLUS Full-text
DOCUMENT NUMBER: 139:205110
TITLE: Pigmented photosensitive resin compositions, pigment dispersions therefor, and dispersants therein
INVENTOR(S): Takahashi, Hidetomo; Ikeda, Kenji; Takeda, Akihiko
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003238835	A	20030827	JP 2002-36370	20020214

PRIORITY APPLN. INFO.: JP 2002-36370 20020214

AB The dispersants contain graft copolymers bearing acidic (e.g., carboxyl) groups and urea and/or urethane groups and may have acid value of 5-150 mg-

KOH/g. Also claimed are compns. of monomers containing ≥2 ethylenically unsatd. groups, optional acidic group-containing binder polymers, and pigments dispersed in organic solvents by the dispersants, suited for LCD color filters.

IC ICM C09B067-20
ICS B01F017-52; C08F290-12; C09B067-46

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 41, 73

ST alkali developable pigment dispersant color filter; carboxyl contg graft copolymer pigment dispersant; acrylic graft alkali developable polymer dispersant

IT Dispersing agents
Optical filters
(acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

IT Macromonomers
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

IT Liquid crystal displays
(color; acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

IT Pigments, nonbiological
(dispersants for; acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

IT 582318-66-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

IT 62-53-3, Aniline, reactions 71-36-3, n-Butanol, reactions 104-75-6, 2-Ethylhexylamine 108-91-8, Cyclohexylamine, reactions 109-73-9, n-Butylamine, reactions 111-26-2, n-Hexylamine 111-36-4, n-Butyl isocyanate 868-77-9, 2-Hydroxyethyl methacrylate 5332-73-0, 3-Methoxypropylamine 30674-80-7, 2-Isocyanatoethyl methacrylate
RL: RCT (Reactant); RACT (Reactant or reagent)
(acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

IT 147-14-8, C.I. Pigment Blue 15:6 14302-13-7, C.I. Pigment Green 36 30125-47-4, C.I. Pigment Yellow 138 84632-65-5, C.I. Pigment Red 254
RL: TEM (Technical or engineered material use); USES (Uses)
(acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

IT 65697-21-4, Benzyl methacrylate-methacrylic acid copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(binders; acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

IT 79-41-4DP, Methacrylic acid, graft copolymer with carboxyl-containing macromonomers and acrylic monomers 80-62-6DP, Methyl methacrylate, graft copolymer with carboxyl-containing macromonomers and acrylic monomers 51293-89-1DP, graft copolymer with carboxyl-containing macromonomers and acrylic monomers 122525-04-6DP, Macromonomer AA 6, graft copolymer with carboxyl-containing macromonomers and acrylic monomers 582315-36-4P 582315-37-5P 582315-38-6P 582315-39-7P 582315-40-0P 582315-41-1P 582315-42-2P 582315-43-3P 582315-44-4P 582315-46-6P 582320-61-4P 582320-63-6P 582320-64-7P 582320-66-9P 582320-67-0P 582320-69-2P 582320-70-5P 582320-72-7P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dispersants; acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

IT 582318-63-6P 582318-65-8DP, Methoxymethyl methacrylate-methyl methacrylate-thioglycolic acid telomer glycidyl methacrylate ester, hydrolyzed
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomers; acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

IT 51293-89-1P 86219-42-3P 106133-24-8P 111653-59-9P 113150-01-9P 117318-88-4P 137133-12-1P 162275-37-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomers for pigment dispersants; acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

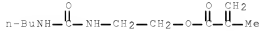
IT 582320-61-4P 582320-64-7P 582320-67-0P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dispersants; acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

RN 582320-61-4 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[(butylamino)carbonyl]amino]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate telomer with mercaptoacetic acid and methyl 2-methyl-2-propenoate hydrogen butanedioate 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, and methyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 111653-59-9
CMF C11 H20 N2 O3



CM 2

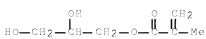
CRN 80-62-6
CMF C5 H8 O2

CM 3

CRN 582318-63-6
CMF C7 H12 O4 . x (C6 H10 O3 . C5 H8 O2)x . x C4 H6 O4 . x C2 H4 O2 S

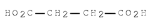
CM 4

CRN 5919-74-4
CMF C7 H12 O4



CM 5

CRN 110-15-6
CMF C4 H6 O4

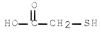


CM 6

CRN 139957-50-9
CMF (C6 H10 O3 . C5 H8 O2)x . C2 H4 O2 S

CM 7

CRN 68-11-1
CMF C2 H4 O2 S

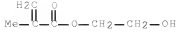


CM 8

CRN 26355-01-1
CMF (C6 H10 O3 . C5 H8 O2)x
CCI PMS

CM 9

CRN 868-77-9
CMF C6 H10 O3



CM 10

CRN 80-62-6
CMF C5 H8 O2

RN 582320-64-7 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[(hexylamino)carbonyl]amino]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate telomer with mercaptoacetic acid and methyl 2-methyl-2-propenoate hydrogen butanedioate 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, Macromonomer AA 6 and phenylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

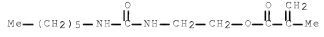
CM 1

CRN 122525-04-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

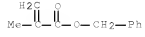
CM 2

CRN 117318-88-4
CMF C13 H24 N2 O3



CM 3

CRN 2495-37-6
CMF C11 H12 O2

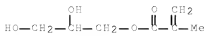


CM 4

CRN 582318-63-6
CMF C7 H12 O4 . x (C6 H10 O3 . C5 H8 O2)x . x C4 H6 O4 . x C2 H4 O2 S

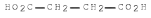
CM 5

CRN 5919-74-4
CMF C7 H12 O4



CM 6

CRN 110-15-6
CMF C4 H6 O4

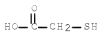


CM 7

CRN 139957-50-9
CMF (C6 H10 O3 . C5 H8 O2)x . C2 H4 O2 S

CM 8

CRN 68-11-1
CMF C2 H4 O2 S

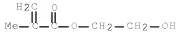


CM 9

CRN 26355-01-1
CMF (C6 H10 O3 . C5 H8 O2)x
CCI PMS

CM 10

CRN 868-77-9
CMF C6 H10 O3



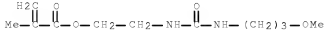
CM 11

CRN 80-62-6
CMF C5 H8 O2

RN 582320-67-0 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, telomer with mercaptoacetic acid and methyl 2-methyl-2-propenoate, hydrogen butanedioate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 2-[[[(3-methoxypropyl)amino]carbonyl]amino]ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 106133-24-8
CMF C11 H20 N2 O4

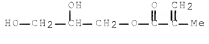


CM 2

CRN 582318-63-6
CMF C7 H12 O4 . x (C6 H10 O3 . C5 H8 O2)x . x C4 H6 O4 . x C2 H4 O2 S

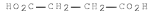
CM 3

CRN 5919-74-4
CMF C7 H12 O4



CM 4

CRN 110-15-6
CMF C4 H6 O4

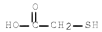


CM 5

CRN 139957-50-9
CMF (C6 H10 O3 . C5 H8 O2)x . C2 H4 O2 S

CM 6

CRN 68-11-1
CMF C2 H4 O2 S

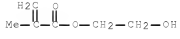


CM 7

CRN 26355-01-1
CMF (C6 H10 O3 . C5 H8 O2)x
CCI PMS

CM 8

CRN 868-77-9
CMF C6 H10 O3



CM 9

CRN 80-62-6
CMF C5 H8 O2

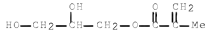
IT 582318-63-6P 582318-65-8DP, Methoxymethyl methacrylate-methyl methacrylate-thioglycolic acid telomer glycidyl methacrylate ester, hydrolyzed
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomers; acid group-containing pigment dispersants for color filter compns. having excellent alkali developability)

RN 582318-63-6 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, telomer with mercaptoacetic acid and methyl 2-methyl-2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, hydrogen butanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

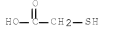
CRN 110-15-6
CMF C4 H6 O4

CM 3

CRN 139957-50-9
CMF (C6 H10 O3 . C5 H8 O2)x . C2 H4 O2 S

CM 4

CRN 68-11-1
CMF C2 H4 O2 S



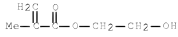
CM 5

CRN 26355-01-1

CMF (C6 H10 O3 . C5 H8 O2)x
CCI PMS

CM 6

CRN 868-77-9
CMF C6 H10 O3



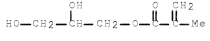
CM 7

CRN 80-62-6
CMF C5 H8 O2

RN 582318-65-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, methoxymethyl ester, telomer with mercaptoacetic acid and methyl 2-methyl-2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

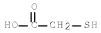


CM 2

CRN 582318-64-7
CMF (C6 H10 O3 . C5 H8 O2)x . C2 H4 O2 S

CM 3

CRN 68-11-1
CMF C2 H4 O2 S

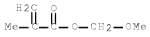


CM 4

CRN 87211-36-7
CMF (C6 H10 O3 . C5 H8 O2)x
CCI PMS

CM 5

CRN 20363-82-0
CMF C6 H10 O3



CM 6

CRN 80-62-6
CMF C5 H8 O2

L181 ANSWER 9 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:349503 ZCAPLUS Full-text
DOCUMENT NUMBER: 138:376513
TITLE: Ink-jet inks for color filters, and manufacture of the inks and color filters
INVENTOR(S): Nishida, Tomonori; Nishiyama, Akira; Kojima, Shiro
PATENT ASSIGNEE(S): Dai Nippon Printing Co., Ltd., Japan; Toa Gosei Chemical Industry Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003128966	A	20030508	JP 2001-326918	20011024
JP 3889953	B2	20070307		
PRIORITY APPLN. INFO.:			JP 2001-326918	20011024

AB The inks contain main polymers that are graft polymers (Mw 5000-20,000) consisting of styrene-based polymer chains as the main chains or graft chains and methacrylate-based polymer chains as the graft chains or main chains, resp. The inks show good discharge stability and form films showing good hardness, strength, and solvent resistance by jet-printing for manufacture of color filters of liquid crystal displays.

IC ICM C09D011-00
ICS B41J002-01; B41M005-00; C08F257-02; C08F265-04

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 42

ST jet ink styrene methacrylate graft copolymer; liq crystal display color filter graft polymer; color filter ink jet graft polymer

IT Liquid crystal displays
Optical filters
(ink-jet inks containing methacrylate-styrene graft copolymers for color filters of liquid crystal displays)

IT Macromonomers
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(ink-jet inks containing methacrylate-styrene graft copolymers for color filters of liquid crystal displays)

IT Inks
(jet-printing, water-thinned; ink-jet inks containing methacrylate-styrene graft copolymers for color filters of liquid crystal displays)

IT 521307-43-7P, Benzyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene graft copolymer hydrogen succinate 521307-44-8P, 2-Hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-styrene graft copolymer hydrogen succinate
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(ink-jet inks containing methacrylate-styrene graft copolymers for color filters of liquid crystal displays)

IT 521307-46-0P, 2-Hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate-styrene graft copolymer hydrogen succinate, polymer with dipentaerythritol pentaacrylate and tripropylene glycol diacrylate 521937-74-6P, Benzyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-styrene graft copolymer hydrogen succinate, polymer with dipentaerythritol pentaacrylate and tripropylene glycol diacrylate
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ink-jet inks containing methacrylate-styrene graft copolymers for color filters of liquid crystal displays)

IT 500583-66-4P 521307-49-3P, Benzyl methacrylate-2-hydroxyethyl methacrylate-mercaptopropionic acid telomer, ester with glycidyl methacrylate and succinic acid
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomer; ink-jet inks containing methacrylate-styrene graft copolymers for color filters of liquid crystal displays)

IT 105-53-3, Diethyl malonate 106-65-0, Dimethyl succinate 108-59-8, Dimethyl malonate 112-07-2, Ethylene glycol monobutyl ether acetate 112-15-2, Diethylene glycol monoethyl ether acetate 112-73-2, Diethylene glycol dibutyl ether 123-25-1, Diethyl succinate 124-17-4, Diethylene glycol monobutyl ether acetate 141-28-6, Diethyl adipate 2050-60-4, Dibutyl oxalate
RL: TEM (Technical or engineered material use); USES (Uses)

(solvent; ink-jet inks containing methacrylate-styrene graft copolymers for color filters of liquid crystal displays)

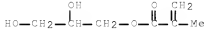
IT 521307-49-3P, Benzyl methacrylate-2-hydroxyethyl methacrylate-mercaptopropionic acid telomer, ester with glycidyl methacrylate and succinic acid
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(macromonomer; ink-jet inks containing methacrylate-styrene graft copolymers for color filters of liquid crystal displays)

RN 521307-49-3 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, telomer with 3-mercaptopropanoic acid and phenylmethyl 2-methyl-2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, hydrogen butanedioate (9CI) (CA INDEX NAME)

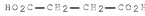
CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

CRN 110-15-6
CMF C4 H6 O4

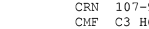


CM 3

CRN 521307-48-2
CMF (C11 H12 O2 . C6 H10 O3)x . C3 H6 O2 S

CM 4

CRN 107-96-0
CMF C3 H6 O2 S

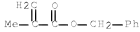


CM 5

CRN 106643-69-0
CMF (C11 H12 O2 . C6 H10 O3)x
CCI PMS

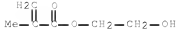
CM 6

CRN 2495-37-6
CMF C11 H12 O2



CM 7

CRN 868-77-9
CMF C6 H10 O3



L181 ANSWER 10 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:665681 ZCAPLUS Full-text
DOCUMENT NUMBER: 133:259344
TITLE: Ultraviolet curable resin composition and photosolder resist ink using the same
INVENTOR(S): Kubo, Tatsuya; Fuyjimoto, Masatoshi; Hashimoto, Soichi
PATENT ASSIGNEE(S): Goo Chemical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1037111	A1	20000920	EP 2000-105770	20000317
EP 1037111	B1	20031022		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000330276	A	20001130	JP 2000-55760	20000301
JP 4081217	B2	20080423		
TW 538309	B	20030621	TW 2000-89104029	20000307
US 6465540	B1	20021015	US 2000-525932	20000314
CN 1267688	A	20000927	CN 2000-104307	20000317
CN 1202180	C	20050518		
AT 252739	T	20031115	AT 2000-105770	20000317
HK 1029401	A1	20040227	HK 2001-100122	20010105

PRIORITY APPLN. INFO.: JP 1999-72809 A 19990317

JP 2000-55760 A 20000301

AB The invention relates to an UV-curable resin composition used in UV-curable and thermosetting -type photo solder resist inks developed with aqueous alkali solution, pixels and protective films for color filter and in the manufacture of printed wiring boards having fine-line, dense conductive pattern. An UV curable resin composition includes (A) an UV curable resin, (B) an epoxy compound having ≥2 epoxy groups in 1 mol, (C) a photopolymn. initiator and (D) a diluent. The UV curable resin (A) is obtained by the steps of polymerizing an ethylenically unsatd. monomer component containing (a) an ethylenically unsatd. monomer having epoxy group and (b) a compound having ≥2 ethylenically unsatd. groups in 1 mol to prepare a copolymer, reacting the copolymer with (c) an ethylenically unsatd. monomer having carboxyl group to prepare a chemical intermediate, and reacting the chemical intermediate with (d) 1 of saturated and unsatd. polybasic acid anhydrides. This resin composition will be preferably used to prepare a photo solder resist ink developable with diluted alkaline aqueous solution

IC G03F007-038

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76

IT 158043-99-3, Epiclon N 680-acrylic acid-tetrahydrophthalic anhydride copolymer 295327-16-1, Glycidyl methacrylate-polypropylene glycol dimethacrylate-methyl methacrylate-tert-butyl methacrylate copolymer, telomer with lauryl mercaptan, acrylate 295327-18-3, Glycidyl methacrylate-methyl methacrylate-tert-butyl methacrylate copolymer, telomer with lauryl mercaptan, acrylate 296240-95-4, Glycidyl methacrylate-polyethylene glycol dimethacrylate-methyl methacrylate copolymer, telomer with lauryl mercaptan, acrylate 296240-98-7, Glycidyl methacrylate-2,2-bis[4-(acryloxy. diethoxy)phenyl]propane-methyl methacrylate-cyclohexyl maleimide copolymer, telomer with lauryl mercaptan, acrylate 296241-01-5, Glycidyl methacrylate-bisphenol A polyethylene glycol polypropylene glycol dimethacrylate-methyl methacrylate-tert-butyl methacrylate copolymer, telomer with lauryl mercaptan, acrylate 296241-04-8, Glycidyl methacrylate-trimethylolpropane trimethacrylate-methyl methacrylate-tert-butyl methacrylate copolymer, telomer with lauryl mercaptan, acrylate 296241-06-0, Glycidyl methacrylate-polyethylene glycol dimethacrylate copolymer, telomer with lauryl mercaptan, acrylate 296241-07-1, Glycidyl methacrylate-polypropylene glycol dimethacrylate-methyl methacrylate-tert-butyl methacrylate copolymer acrylate 296241-09-3, Glycidyl methacrylate-trimethylolpropane trimethacrylate copolymer, telomer with lauryl mercaptan, acrylate RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(UV-curable resin composition for photosolder resist ink, preparation of)

IT 295327-16-1, Glycidyl methacrylate-polypropylene glycol dimethacrylate-methyl methacrylate-tert-butyl methacrylate copolymer, telomer with lauryl mercaptan, acrylate 295327-18-3, Glycidyl methacrylate-methyl methacrylate-tert-butyl methacrylate copolymer, telomer with lauryl mercaptan, acrylate 296240-95-4, Glycidyl methacrylate-polyethylene glycol dimethacrylate-methyl methacrylate copolymer, telomer with lauryl mercaptan, acrylate 296240-98-7, Glycidyl methacrylate-2,2-bis[4-(acryloxy. diethoxy)phenyl]propane-methyl methacrylate-cyclohexyl maleimide copolymer, telomer with lauryl mercaptan, acrylate 296241-01-5, Glycidyl methacrylate-bisphenol A polyethylene glycol polypropylene glycol dimethacrylate-methyl methacrylate-tert-butyl methacrylate copolymer, telomer with lauryl mercaptan, acrylate 296241-04-8, Glycidyl methacrylate-trimethylolpropane trimethacrylate-methyl

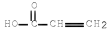
methacrylate-tert-butyl methacrylate copolymer, telomer with lauryl mercaptan, acrylate 296241-06-0, Glycidyl methacrylate-polyethylene glycol dimethacrylate copolymer, telomer with lauryl mercaptan, acrylate 296241-09-3, Glycidyl methacrylate-trimethylolpropane trimethacrylate copolymer, telomer with lauryl mercaptan, acrylate
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(UV-curable resin composition for photosolder resist ink, preparation of)

RN 295327-16-1 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, telomer with 1-dodecanethiol, methyl 2-methyl-2-propenoate, α-(2-methyl-1-oxo-2-propenyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly[oxy(methyl-1,2-ethanediyl)] and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2



CM 2

CRN 295327-15-0
CMF C12 H26 S . (C8 H14 O2 . C7 H10 O3 . C5 H8 O2 . (C3 H6 O)n C8 H10 O3)x

CM 3

CRN 112-55-0
CMF C12 H26 S

CM 4

CRN 295327-14-9
CMF (C8 H14 O2 . C7 H10 O3 . C5 H8 O2 . (C3 H6 O)n C8 H10 O3)x
CCI PMS

CM 5

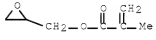
CRN 25852-49-7
CMF (C3 H6 O)n C8 H10 O3
CCI IDS, PMS

CM 6

CRN 585-07-9
CMF C8 H14 O2

CM 7

CRN 106-91-2
CMF C7 H10 O3



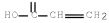
CM 8

CRN 80-62-6
CMF C5 H8 O2

RN 295327-18-3 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, telomer with 1-dodecanethiol, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

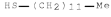


CM 2

CRN 29532?-17-2
CMF C12 H26 S . (C8 H14 O2 . C7 H10 O3 . C5 H8 O2)x

CM 3

CRN 112-55-0
CMF C12 H26 S



CM 4

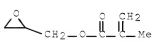
CRN 154707-73-0
CMF (C8 H14 O2 . C7 H10 O3 . C5 H8 O2)x
CCI PMS

CM 5

CRN 585-07-9
CMF C8 H14 O2

CM 6

CRN 106-91-2
CMF C7 H10 O3



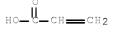
CM 7

CRN 80-62-6
CMF C5 H8 O2

RN 296240-95-4 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, telomer with 1-dodecanethiol, α-(2-methyl-1-oxo-2-propenyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2



CM 2

CRN 296240-94-3
CMF C12 H26 S . (C7 H10 O3 . C5 H8 O2 . (C2 H4 O)n C8 H10 O3)x

CM 3

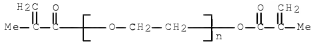
CRN 112-55-0
CMF C12 H26 S

CM 4

CRN 296240-93-2
CMF (C7 H10 O3 . C5 H8 O2 . (C2 H4 O)n C8 H10 O3)x
CCI PMS

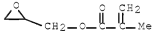
CM 5

CRN 25852-47-5
CMF (C2 H4 O)n C8 H10 O3
CCI PMS



CM 6

CRN 106-91-2
CMF C7 H10 O3



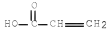
CM 7

CRN 80-62-6
CMF C5 H8 O2

RN 296240-98-7 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, telomer with 1-cyclohexyl-1H-pyrrole-2,5-dione, 1-dodecanethiol, (1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) di-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (ester) (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2



CM 2

CRN 296240-97-6
CMF (C25 H28 O6 . C10 H13 N O2 . C7 H10 O3 . C5 H8 O2)x . C12 H26 S

CM 3

CRN 112-55-0
CMF C12 H26 S

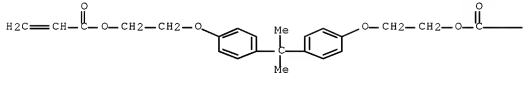
CM 4

CRN 296240-96-5
CMF (C25 H28 O6 . C10 H13 N O2 . C7 H10 O3 . C5 H8 O2)x
CCI PMS

CM 5

CRN 24447-78-7
CMF C25 H28 O6

PAGE 1-A



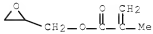
PAGE 1-B

CM 6

CRN 1631-25-0
CMF C10 H13 N O2

CM 7

CRN 106-91-2
CMF C7 H10 O3



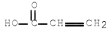
CM 8

CRN 80-62-6
CMF C5 H8 O2

RN 296241-01-5 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, telomer with 1-dodecanethiol, methyl 2-methyl-2-propenoate, methyloxirane polymer with oxirane ether with 4,4'-(1-methylethylidene)bis[phenol] (2:1) bis(2-methyl-2-propenoate), and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

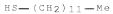


CM 2

CRN 296241-00-4
CMF (C15 H16 O2 . C8 H14 O2 . C7 H10 O3 . C5 H8 O2 . 2 C4 H6 O2 . 2 (C3 H6 O . C2 H4 O)x)x . C12 H26 S

CM 3

CRN 112-55-0
CMF C12 H26 S

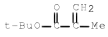


CM 4

CRN 296240-99-8
CMF (C15 H16 O2 . C8 H14 O2 . C7 H10 O3 . C5 H8 O2 . 2 C4 H6 O2 . 2 (C3 H6 O . C2 H4 O)x)x
CCI PMS

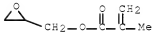
CM 5

CRN 585-07-9
CMF C8 H14 O2



CM 6

CRN 106-91-2
CMF C7 H10 O3



CM 7

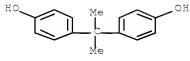
CRN 80-62-6
CMF C5 H8 O2

CM 8

CRN 83868-76-2
CMF C15 H16 O2 . 2 C4 H6 O2 . 2 (C3 H6 O . C2 H4 O)x

CM 9

CRN 80-05-7
CMF C15 H16 O2



CM 10

CRN 79-41-4
CMF C4 H6 O2

CM 11

CRN 9003-11-6
CMF (C3 H6 O . C2 H4 O)x
CCI PMS

CM 12

CRN 75-56-9
CMF C3 H6 O

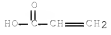
CM 13

CRN 75-21-8
CMF C2 H4 O

RN 296241-04-8 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, telomer with 1,1-dimethylethyl 2-methyl-2-propenoate, 1-dodecanethiol, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2



CM 2

CRN 296241-03-7
CMF (C18 H26 O6 . C8 H14 O2 . C7 H10 O3 . C5 H8 O2)x . C12 H26 S

CM 3

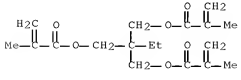
CRN 112-55-0
CMF C12 H26 S

CM 4

CRN 296241-02-6
CMF (C18 H26 O6 . C8 H14 O2 . C7 H10 O3 . C5 H8 O2)x
CCI PMS

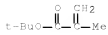
CM 5

CRN 3290-92-4
CMF C18 H26 O6



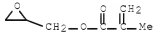
CM 6

CRN 585-07-9
CMF C8 H14 O2



CM 7

CRN 106-91-2
CMF C7 H10 O3



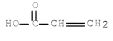
CM 8

CRN 80-62-6
CMF C5 H8 O2

RN 296241-06-0 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, telomer with 1-dodecanethiol and α-(2-methyl-1-oxo-2-propenyl)-ω-[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl), 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2



CM 2

CRN 296241-05-9
CMF C12 H26 S . (C7 H10 O3 . (C2 H4 O)n C8 H10 O3)x

CM 3

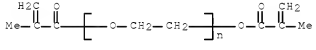
CRN 112-55-0
CMF C12 H26 S

CM 4

CRN 173558-35-5
CMF (C7 H10 O3 . (C2 H4 O)n C8 H10 O3)x
CCI PMS

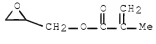
CM 5

CRN 25852-47-5
CMF (C2 H4 O)n C8 H10 O3
CCI PMS



CM 6

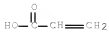
CRN 106-91-2
CMF C7 H10 O3



RN 296241-09-3 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, telomer with 1-dodecanethiol and oxiranylmethyl 2-methyl-2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7
CMF C3 H4 O2

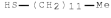


CM 2

CRN 296241-08-2
CMF (C18 H26 O6 . C7 H10 O3)x . C12 H26 S

CM 3

CRN 112-55-0
CMF C12 H26 S

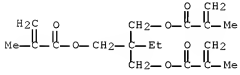


CM 4

CRN 52847-98-0
CMF (C18 H26 O6 . C7 H10 O3)x
CCI PMS

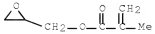
CM 5

CRN 3290-92-4
CMF C18 H26 O6



CM 6

CRN 106-91-2
CMF C7 H10 O3



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L181 ANSWER 11 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:205717 ZCAPLUS Full-text
DOCUMENT NUMBER: 132:244013
TITLE: Light-sensitive black resin composition for black matrix formation, method for preparation thereof, and method for black matrix formation using same
INVENTOR(S): Shima, Yasuhiro; Tani, Mizuhito; Tamura, Akira; Ikeda, Hayato; Ando, Nobuyuki
PATENT ASSIGNEE(S): Toppan Printing Co., Ltd., Japan; Nippon Shokubai Kagaku Kogyo Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000089005	A	20000331	JP 1998-254087	19980908
JP 4165780	B2	20081015		
PRIORITY APPLN. INFO.:			JP 1998-254087	19980908

AB The light-sensitive black resin composition for black matrix formation has a grafted carbon black and a binder resin, wherein the grafted carbon black is prepared by grafting carbon black with a polymer with a hydroxy group and by introducing a carboxy group into the carbon black using an acid anhydride and wherein the binder resin has a carboxy group by introduced with the acid anhydride. The resin composition provides the excellent sensitivity and image d.

IC ICM G02B005-00
ICS C08K009-04; C08L101-00; G02F001-1335; G03F007-004; G03F007-033; C09C001-48; C09D201-00

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Cathode ray tubes
Optical filters
(light-sensitive black resin composition for black matrix formation, method for preparation thereof, and method for black matrix formation using same)

IT 35227-05-5P, Butyl methacrylate-methyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid copolymer 85496-75-9P, Methyl methacrylate-2-hydroxyethyl methacrylate-styrene-trimellitic anhydride copolymer 160274-36-2P, Methyl methacrylate-2-hydroxyethyl methacrylate telomer with thioglycolic acid, ester with glycidyl methacrylate
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(light-sensitive black resin composition)

IT 160274-36-2P, Methyl methacrylate-2-hydroxyethyl methacrylate telomer with thioglycolic acid, ester with glycidyl methacrylate
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(light-sensitive black resin composition)

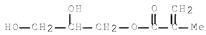
RN 160274-36-2 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, telomer with mercaptoacetic acid and methyl 2-methyl-2-propenoate,

2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4



CM 2

CRN 139957-50-9
CMF (C6 H10 O3 . C5 H8 O2)x . C2 H4 O2 S

CM 3

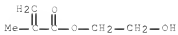
CRN 68-11-1
CMF C2 H4 O2 S

CM 4

CRN 26355-01-1
CMF (C6 H10 O3 . C5 H8 O2)x
CCI PMS

CM 5

CRN 868-77-9
CMF C6 H10 O3



CM 6

CRN 80-62-6
CMF C5 H8 O2

L181 ANSWER 12 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:792980 ZCAPLUS Full-text
DOCUMENT NUMBER: 130:88239
TITLE: Color filter for liquid crystal display and its production method
INVENTOR(S): Ito, Shinji; Sakagawa, Makoto
PATENT ASSIGNEE(S): Toppan Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

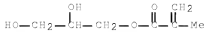
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10325902	A	19981208	JP 1997-135209	19970526
PRIORITY APPLN. INFO.:			JP 1997-135209	19970526

AB In the title color filter having pixels and a black matrix layer on a transparent substrate, the black matrix layer made of a black resin composition is formed between and around pixels on the exposed and roughened transparent substrate in the same plane as the pixels. Manufacture of the color filter including formation of black matrix is also claimed. The invention color filter shows high optical d. and low reflectivity.
IC ICM G02B005-20
ICS G02F001-1335
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST color filter liq crystal display; black matrix color filter
IT Optical filters
(having black matrix between and around pixel in same plane as the pixel)
IT 160274-36-2P, 2-Hydroxyethyl methacrylate-methyl methacrylate telomer with thioglycolic acid glycidyl methacrylate ester
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepared as macromonomer for preparation of resin for black matrix composition for
color filter and its manufacture)
IT 125953-91-5P, 2-Hydroxyethyl methacrylate-methyl methacrylate-styrene graft copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepared for black matrix composition for color filter and its manufacture)
IT 160274-36-2P, 2-Hydroxyethyl methacrylate-methyl methacrylate telomer with thioglycolic acid glycidyl methacrylate ester
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepared as macromonomer for preparation of resin for black matrix composition for
color filter and its manufacture)
RN 160274-36-2 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, telomer with mercaptoacetic acid and methyl 2-methyl-2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

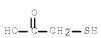


CM 2

CRN 139957-50-9
CMF (C6 H10 O3 . C5 H8 O2)x . C2 H4 O2 S

CM 3

CRN 68-11-1
CMF C2 H4 O2 S

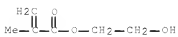


CM 4

CRN 26355-01-1
CMF (C6 H10 O3 . C5 H8 O2)x
CCI PMS

CM 5

CRN 868-77-9
CMF C6 H10 O3



CM 6

CRN 80-62-6
CMF C5 H8 O2

L181 ANSWER 13 OF 13 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:98473 ZCAPLUS Full-text
DOCUMENT NUMBER: 128:198634
ORIGINAL REFERENCE NO.: 128:39145a,39148a
TITLE: Radiation-sensitive pigmented resin compositions containing copolymers of macromonomers for color filters
INVENTOR(S): Suzuki, Nobuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10036622	A	19980210	JP 1996-200472	19960730

PRIORITY APPLN. INFO.: JP 1996-200472 19960730

AB The compns. contain (A) copolymers of (i) macromonomers with weight-average mol. weight ≤2 × 104 and composed of polymer main chains containing polymer components (II) and having at one chain end polymerizable double bonds (I), (ii) monomers (III), and (iii) compds. with ≥1 (un)substituted amide groups (IV), (B) radiation-sensitive compds., and (C) pigments, wherein I is c1HC:Cc2V0 (V0 = CO2, O2C, CH2O2C, CH2CO2, O, SO2, CO, CONHCO2, CONHCONH, CONHSO2, CONP3, SO2NP3, C6H4; P3 = H, hydrocarbyl; c1, c2 = H, halo, cyano, hydrocarbyl, CO2Z1 which may be linked via hydrocarbyl; Z1 = H, hydrocarbyl), II is d1HCCd2(V1Q1) and/or d1HCCd2Q0 (V1 = same as V0 in I; Q1 = C1-18 aliphatic, C6-12 aromatic; d1, d2 = c1, c2 in I; Q0 = CN, C6H4T; T = H, halo, hydrocarbyl, alkoxy, CO2Z2; Z2 = alkyl, aralkyl, aryl), III is e1HC:Ce2V2Q2 (V2 = V1 in II; Q2 = Q1 in II; e1, e2 = c1, c2 in I), and IV is CONR1R2 (R1, R2 = H, C1-18 hydrocarbyl; R1 and R2 may be linked together to form a ring via O, S, NR3; R3 = H, C1-12 hydrocarbyl). The compns. may contain alkaline-soluble resins. Pigment dispersibility is improved.

IC ICM C08L051-06
ICS C09D151-06; G02B005-20; C08F290-04

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST macromonomer graft copolymer radiation sensitive compn; color filter macromer graft copolymer photopolymn; UV curable pigmented resin color filter; liq crystal display color filter photoresist; photoresist color filter macromer graft copolymer

IT Liquid crystal displays
Optical filters
Photoresists
(radiation-sensitive pigmented resin compns. containing copolymers of macromonomers for color filters)

IT Macromonomers

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(radiation-sensitive pigmented resin compns. containing copolymers of macromonomers for color filters)

IT 203711-32-4P, Acrylamide-benzyl methacrylate-methyl methacrylate graft copolymer 203711-33-5P, Acrylamide-benzyl methacrylate graft copolymer 203711-34-6P, Acrylamide-benzyl methacrylate-butyl acrylate graft copolymer 203711-35-7P, Acrylamide-benzyl methacrylate-Macromonomer AB 6 graft copolymer 203711-36-8P, Acrylamide-benzyl methacrylate-Macromonomer AA 6 graft copolymer 203711-37-9P, Acrylamide-Macromonomer AS 6-methyl methacrylate graft copolymer 203711-38-0P, Methacrylamide-Macromonomer AB 6-methyl methacrylate graft copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(radiation-sensitive pigmented resin compns. containing copolymers of macromonomers for color filters)

IT 25086-15-1, Methacrylic acid-methyl methacrylate copolymer 65697-21-4, Benzyl methacrylate-methacrylic acid copolymer 65697-22-5, Acrylic acid-benzyl methacrylate copolymer 191545-17-2, Benzyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-methyl methacrylate copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(radiation-sensitive pigmented resin compns. containing copolymers of macromonomers for color filters)

IT 4986-89-4, Pentaerythritol tetraacrylate 60506-81-2, Dipentaerythritol pentaacrylate
RL: TEM (Technical or engineered material use); USES (Uses)
(radiation-sensitive pigmented resin compns. containing copolymers of macromonomers for color filters)

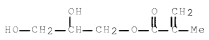
IT 96595-56-1P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(telomer macromer ester; radiation-sensitive pigmented resin compns. containing copolymers of macromonomers for color filters)

IT 96595-56-1P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(telomer macromer ester; radiation-sensitive pigmented resin compns. containing copolymers of macromonomers for color filters)

RN 96595-56-1 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, telomer with mercaptoacetic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4
CMF C7 H12 O4

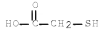


CM 2

CRN 67076-30-6
CMF (C5 H8 O2)x . C2 H4 O2 S

CM 3

CRN 68-11-1
CMF C2 H4 O2 S



CM 4

CRN 9011-14-7
CMF (C5 H8 O2)x
CCI PMS

CM 5

CRN 80-62-6
CMF C5 H8 O2

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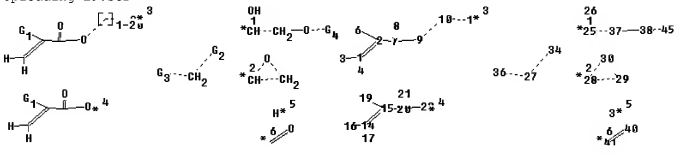

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1  2  3  4  6  7  8  14  15  16  17  19  20  21  25  26  27  34  36  37  38  39
40  41  45
ring nodes :
28  29  30
ring/chain nodes :
9  10  11  22
chain bonds :
1-2  1-3  1-4  2-6  2-7  7-8  7-9  14-15  14-16  14-17  15-19  15-20  20-21  20-22
25-26  25-37  27-34  27-36  37-38  38-45  40-41
ring/chain bonds :
9-10  10-11
ring bonds :
28-30  28-29  29-30
exact/norm bonds :
2-6  7-8  7-9  9-10  10-11  15-19  20-21  20-22  25-26  25-37  27-34  27-36  28-30
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exact bonds :
1-2  1-3  1-4  2-7  14-15  14-16  14-17  15-20  37-38
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G1:H,CH3

G2:[*1],[*2]

G3:[*3],[*4]

G4:[*5],[*6]

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40:CLASS  41:CLASS  45:CLASS



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L9              STR
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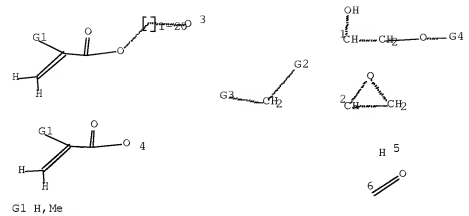

G1 H,Me
G2 [@1],[@2]
G3 [@3],[@4]
G4 [@5],[@6]

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L184 ANSWER 1 OF 10  ZCAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2006:358178  ZCAPLUS  Full-text
DOCUMENT NUMBER:          144:401146
TITLE:                    Method for manufacturing electrophotographic carrier
                          having covered layer on core particle and developer
                          containing it
INVENTOR(S):              Shibai, Yasuhiro; Tsubaki, Yorihisa; Kikawa, Keiichi;
                          Aoki, Momomi
PATENT ASSIGNEE(S):       Sharp Corp., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 17 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
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LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006106208	A	20060420	JP 2004-290554	20041001
PRIORITY APPLN. INFO.:			JP 2004-290554	20041001

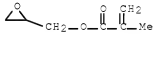
AB The method comprises steps for (a) dispersing an elec. conducting material into a resin for forming a composite material, (b) mixing the composite material and the core particle in supercrit. fluid, and (c) decompressing the obtained mixture to the pressure less than the critical pressure of the fluid for forming the covered layer. The developer contains the carrier with the covered layer containing the resin in which the elec. conducting material is dispersed. The carrier shows stable charging characteristics and improved impact and abrasion resistance.

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 79-41-4D, Methacrylic acid, esters, polymers with glycidyl methacrylate and styrene 100-42-5D, Styrene, polymers with glycidyl methacrylate and methacrylic acid ester 106-91-2D, Glycidyl methacrylate, polymers with styrene and methacrylic acid ester
RL: TEM (Technical or engineered material use); USES (Uses)
(carrier covered with; manufacture of electrophotog. carrier covered with resin containing conductive particle using supercrit. fluid)

IT 106-91-2D, Glycidyl methacrylate, polymers with styrene and methacrylic acid ester
RL: TEM (Technical or engineered material use); USES (Uses)
(carrier covered with; manufacture of electrophotog. carrier covered with resin containing conductive particle using supercrit. fluid)

RN 106-91-2 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)



L184 ANSWER 2 OF 10 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:872635 ZCAPLUS Full-text
DOCUMENT NUMBER: 139:356770
TITLE: Fabrication of ceramic substrate
INVENTOR(S): Hara, Yoshitake; Yamashiki, Tomoya; Sadakuni, Hironobu; Shinba, Michiyo; Kamioka, Takenori
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003318313	A	20031107	JP 2002-121940	20020424

PRIORITY APPLN. INFO.: JP 2002-121940 20020424

AB In fabricating a ceramic substrate using a photosensitive ceramic composition containing a photosensitive organic component and inorg. particles (average particle size ≤ 420 nm) ≥ 30 weight %, a development method involves spraying and/or dipping as well as ultrasonic development. Optionally, a developing solution may be used, which comprises an aqueous solution containing an alkali metal and/or alkaline earth metal and/or an organic alkali solution containing an amine. The method is useful for photolithog. forming an accurate via hole.

IC ICM H01L023-12
ICS H05K001-03; H05K003-00

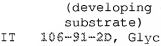
CC 76-2 (Electric Phenomena)

IT 106-91-2D, Glycidyl methacrylate, addition product with methacrylic acid-Me methacrylate-styrene copolymer 107-10-8, Propylamine, uses 111-26-2, Hexylamine 141-43-5, Monoethanolamine, uses 497-19-8, Sodium carbonate, uses 584-08-7, Potassium carbonate 1305-62-0, Calcium hydroxide, uses 1344-28-1, Alumina, uses 7631-86-9, Silica, uses 9002-98-6 25035-81-8D, Methacrylic acid-methyl methacrylate-styrene copolymer, addition product with glycidyl methacrylate 36196-68-6, Bis(2-hydroxy-3-methacryloyloxypropyl)isopropylamine 68644-83-7, p-Cumylphenol ethylene oxide adduct acrylate 129283-82-5, Bis(4-methacryloylthiophenyl)sulfide 405081-55-2, TN 1
RL: NUU (Other use, unclassified); USES (Uses)
(developing of photosensitive ceramic composition in fabrication of ceramic substrate)

IT 106-91-2D, Glycidyl methacrylate, addition product with methacrylic acid-Me methacrylate-styrene copolymer
RL: NUU (Other use, unclassified); USES (Uses)
(developing of photosensitive ceramic composition in fabrication of ceramic substrate)

RN 106-91-2 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)

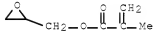


L184 ANSWER 3 OF 10 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:166250 ZCAPLUS Full-text
DOCUMENT NUMBER: 130:244534
TITLE: Process for manufacture of plasma display panel substrate involving light sensitive organic binder
INVENTOR(S): Iguchi, Yuichiro; Matsumoto, Masahiro; Masaki, Takaki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 11067088 A 19990309 JP 1997-217348 19970812
PRIORITY APPLN. INFO.: JP 1997-217348 19970812
AB The process comprises the steps of: (1) applying a RGB fluorescent paste made from fluorescence glass powder and a light-sensitive organic binder in a cell according to screen printing, ink-jet printing, etc. on a substrate; and (2) pattern-wise exposing the substrate; and (3) baking the substrate. The process provides a PDP substrate of little paste soiling on the top of a lib and of little paste running.
IC ICM H01J009-227
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 42
IT 106-91-2D, Glycidyl methacrylate, reaction product with methacrylic acid-Me methacrylate-styrene copolymer 15625-89-5, Trimethylolpropane triacrylate 25035-81-8D, Methacrylic acid-methyl methacrylate-styrene copolymer, reaction product with glycidyl methacrylate
RL: TEM (Technical or engineered material use); USES (Uses)
(light-sensitive organic binder for plasma display panel substrate)
IT 106-91-2D, Glycidyl methacrylate, reaction product with methacrylic acid-Me methacrylate-styrene copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(light-sensitive organic binder for plasma display panel substrate)
RN 106-91-2 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)

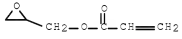


L184 ANSWER 4 OF 10 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:712742 ZCAPLUS Full-text
DOCUMENT NUMBER: 130:14793
TITLE: Adhesive tapes containing acrylic acid derivative-grafted base polymers for polyolefin substrates
INVENTOR(S): Matsumiya, Hisao; Otani, Junichi
PATENT ASSIGNEE(S): Hitachi Kasei Polymer Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
JP 10292161 A 19981104 JP 1997-131545 19970416
PRIORITY APPLN. INFO.: JP 1997-131545 19970416
AB Title heat-resistant tapes have 20-200 μm films (on supports) made of crosslinked adhesives containing functional group-substituted acrylic acid derivative-grafted styrene block copolymers as base polymers, tackifiers, and crosslinking agents reactive with the functional groups in the base polymers.

Thus, graft polymerizing 100 parts butadiene-styrene-ethylene copolymer (Cariflex KX 65) and 20 parts methacrylic acid in the presence of Bz2O2 and mixing the resulted polymer with a disproportionated rosin resin (Superester A 115) 50, a petroleum resin (Alkon P 125) 50, and a stabilizer 1 part gave an adhesive, 100 parts (as solid) of which was mixed with 1 part (as solid) an oxazoline, applied on a releasing paper at 50 μm thickness, dried, and laminated with a polyester film at 80° to give title adhesive tape. Then, the tape was laminated on a polypropylene plate and pressed to give a test piece showing high 180° peeling strength.

IC ICM C09J007-02
ICS C09J151-00
CC 38-3 (Plastics Fabrication and Uses)
IT 79-41-4DP, Methacrylic acid, graft copolymer with hydrogenated butadiene-styrene block rubber 103-11-7DP, 2-Ethylhexyl acrylate, graft copolymer with hydrogenated butadiene-styrene block rubber 106-90-1DP, Glycidyl acrylate, graft copolymer with hydrogenated butadiene-styrene block rubber
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic acid derivative-grafted styrene polymer-based adhesives containing hardeners for adhesive tapes for polyolefin substrates)
IT 106-90-1DP, Glycidyl acrylate, graft copolymer with hydrogenated butadiene-styrene block rubber
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic acid derivative-grafted styrene polymer-based adhesives containing hardeners for adhesive tapes for polyolefin substrates)
RN 106-90-1 ZCAPLUS
CN 2-Propenoic acid, 2-oxiranylmethyl ester (CA INDEX NAME)



L184 ANSWER 5 OF 10 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:435966 ZCAPLUS Full-text
DOCUMENT NUMBER: 129:82422
ORIGINAL REFERENCE NO.: 129:17011a,17014a
TITLE: Electrically insulating polymer compositions and manufacture of multilayer printed circuit boards using them
INVENTOR(S): Haruda, Yoichi; Hiraoka, Hideki; Matsumoto, Katsuya; Hibino, Hiroshi; Kimura, Kaoru
PATENT ASSIGNEE(S): Toa Gosei Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 10182758	A	19980707	JP 1996-357297	19961226
PRIORITY APPLN. INFO.:			JP 1996-357297	19961226

AB Title compns., which show good heat, impact, and fire resistances and processability, comprise (1) CO2H-containing alkali-soluble (meth)acrylic polymers, (2) ≥1 C:C unsatd. double bond-having polymerizable compds., (3) UV polymerization initiators for (2), (4) UV polymerization sensitizers, (5) thermal polymerization initiators for (2), (6) CO2H-containing crosslinked elastic polymer fine particles [particle size (PS) <1 μm], and (7) fine particulate substances (PS = 1-10 μm), in which a cured product of the compns. is insol. to chemical agents but (7) is soluble to them. Multilayer printed circuit boards are manufactured by (a) applying the above compns. on an inner layer panel having an elec. conductive circuit pattern to form an elec. insulating layer (IL), (b) exposing IL to UV, (c) developing with an aqueous alkali solution to form blind via holes, (d) dissolving (7) of the above compns. in chemical agents to coarsen the IL surface, (e) plating metals on IL surface, and (f) patterning an outer-layer conducive circuit pattern, wherein the process of thermosetting IL layer is included before or after either process between (c) and (e). Thus, an insulating composition containing a polymer (prepared from acrylic acid-Me acrylate-styrene copolymer and glycidyl methacrylate), polyethylene glycol diacrylate, JSR-DHS 2 (CO2H-modified crosslinked acrylic rubber; average PS = 0.07 μm), CO2H-containing crosslinked NBR (average PS = 3.5 μm), brominated bisphenol A-epoxy methacrylate, Irgacure 907, Kayacure EPA, Reofos (phosphate), Perhexyne 25B, and MEK gave a multilayer printed circuit board with good heat, impact, and fire resistances, and processability.

IC ICM C08F265-00
ICS C08F002-44; C08F002-48; G03F007-038; H05K003-46

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 76

IT Polymerization catalysts
(photopolymn.; insulating polymer compns. with good heat, impact, and fire resistances and processability for manufacture of multilayer printed circuit boards)

IT Polymerization catalysts
(thermal; insulating polymer compns. with good heat, impact, and fire resistances and processability for manufacture of multilayer printed circuit boards)

IT 71868-10-5, Irgacure 907
RL: CAT (Catalyst use); USES (Uses)
(UV photopolymn. catalyst; insulating polymer compns. with good heat, impact, and fire resistances and processability for manufacture of multilayer printed circuit boards)

IT 106-91-2DP, reaction products with acrylic acid -Me acrylate-styrene copolymer 25586-23-6DP, Acrylic acid-methyl acrylate-styrene copolymer, reaction products with glycidyl methacrylate
RL: DEV (Device component use); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(insulating polymer compns. with good heat, impact, and fire resistances and processability for manufacture of multilayer printed circuit boards)

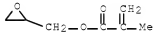
IT 1068-27-5, Perhexyne 25B
RL: CAT (Catalyst use); USES (Uses)
(thermal polymerization catalyst; insulating polymer compns. with

good heat, impact, and fire resistances and processability for manufacture of multilayer printed circuit boards)

IT 106-91-2DP, reaction products with acrylic acid -Me acrylate-styrene copolymer
RL: DEV (Device component use); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)
(insulating polymer compns. with good heat, impact, and fire resistances and processability for manufacture of multilayer printed circuit boards)

RN 106-91-2 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)



L184 ANSWER 6 OF 10 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:198737 ZCAPLUS Full-text

DOCUMENT NUMBER: 120:198737

ORIGINAL REFERENCE NO.: 120:35037a,35040a

TITLE: Ceramic green sheets for semiconductor substrates

INVENTOR(S): Masaki, Takaki; Kitagawa, Takao; Yoshimura, Akiko; Iwanaga, Keiji

PATENT ASSIGNEE(S): Toray Industries, Inc., Can.

SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

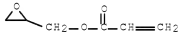
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9401377	A1	19940120	WO 1993-JP862	19930625
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 06024824	A	19940201	JP 1992-180077	19920707
JP 3312389	B2	20020805		
EP 602252	A1	19940622	EP 1993-913579	19930625
EP 602252	B1	20000830		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 06305814	A	19941101	JP 1994-28293	19940225
JP 3324259	B2	20020917		
US 6004705	A	19991221	US 1996-681483	19960722

PRIORITY APPLN. INFO.: JP 1992-180077 A 19920707
JP 1993-38325 A 19930226
WO 1993-JP862 W 19930625
US 1994-204293 A1 19940307

AB The green sheets contain ceramic powder and a photosensitive resin. Via holes (penetrating 1 layer)and through holes (penetrating all layers) of accurate fine sizes can be readily and economically formed on these green sheets for multilayer substrates.

IC ICM C04B035-00
CC 57-2 (Ceramics)
Section cross-reference(s): 76
IT 106-90-1D, Glycidyl acrylate, reaction products with methacrylic acid-Me methacrylate-styrene copolymers 25035-81-8D, Methacrylic acid-methyl methacrylate-styrene copolymer, reaction products with glycidyl acrylate
RL: USES (Uses)
(ceramic green sheets containing, for semiconductor substrates)
IT 106-90-1D, Glycidyl acrylate, reaction products with methacrylic acid-Me methacrylate-styrene copolymers
RL: USES (Uses)
(ceramic green sheets containing, for semiconductor substrates)
RN 106-90-1 ZCAPLUS
CN 2-Propenoic acid, 2-oxiranylmethyl ester (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L184 ANSWER 7 OF 10 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:256977 ZCAPLUS Full-text
DOCUMENT NUMBER: 114:256977
ORIGINAL REFERENCE NO.: 114:43207a,43210a
TITLE: Photosensitive solder resists
INVENTOR(S): Ochiai, Tameichi; Takahashi, Noriaki; Takasaki, Ryuichiro; Endo, Noriko
PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02289857	A	19901129	JP 1989-111339	19890428
PRIORITY APPLN. INFO.:			JP 1989-111339	19890428

AB Solder resists contain (a) vinylic polymers containing units -CH2CR1[CO2CH2CH(OH)CH2OCOCR2:CH2]- (R1-2 = H, Me) and carboxylic groups, (b) compds. having ≥2 double bonds, (c) photopolymn. initiator, and (d) inorg. fine particles. High performance solder mask is obtained, using non-flammable developers. Thus, a polymerization product of 4 mol styrene and 5 mol methacrylic acid was treated with 1 mol glycidyl methacrylate to obtain a polymer with weight-average mol. weight 30,000. A composition containing this polymer 35, pentaerythritol triacrylate 15, Ph2CO 1.6, Michler's ketone 0.1, Phthalocyanine Green 0.17, and talc 17 parts was applied on a circuit board and dried to obtain a 30-μm-thick layer. Exposure through a photomask, development with sprayed 1% Na2CO3, and post-exposure to UV gave a resist

pattern, which showed high resistance to rubbing with trichloroethylene, solder bath, and to lifting with adhesive tape.

IC ICM G03F007-038
ICS C08F299-00; H05K003-28

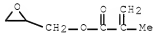
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 106-91-2D, reaction products with methoxyphenol and styrene -methacrylic acid polymer 150-76-5D, reaction products with glycidyl methacrylate and styrene-methacrylic acid polymer 9010-92-8D, reaction products with methoxyphenol and glycidyl methacrylate
RL: USES (Uses)
(photoresists for solder masks containing)

IT 106-91-2D, reaction products with methoxyphenol and styrene -methacrylic acid polymer
RL: USES (Uses)
(photoresists for solder masks containing)

RN 106-91-2 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)



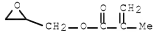
L184 ANSWER 8 OF 10 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1986:218334 ZCAPLUS Full-text
DOCUMENT NUMBER: 104:218334
ORIGINAL REFERENCE NO.: 104:34431a,34434a
TITLE: Liquid chromatography gel
INVENTOR(S): Kobashi, Toshiyuki; Takagi, Shoyo; Naka, Hideo
PATENT ASSIGNEE(S): Japan Exlan Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61034463	A	19860218	JP 1984-156943	19840726
JP 06048267	B	19940622		

PRIORITY APPLN. INFO.: JP 1984-156943 19840726

AB The gel is prepared by opening the epoxy ring and introducing OH to granular copolymers of monovinyl acid glycidyl esters and glycidyl monovinyl ethers by treating in an aqueous medium acidified by acids RCO2H (R = H, C1-4 alkyl, alkylene). The gel shows lasting separability. Thus, 20 parts water-soluble methacrylic acid-Na p-styrenesulfonate copolymer was polymerized with 200 parts glycidyl methacrylate at 60° for 2 h in H2O in the presence of 2,2'-azobis(2,4-dimethylvaleronitrile), then the product was stirred with 50 parts HCO2H at 90° for 2 h to give polymer beads (containing 92% gel H2O). The beads (50-350 mesh) were packed in a column and used to sep. an aqueous

solution containing Na2SO4, NaCl, NaNO3, and NaSCN. The 4 components were well separated even after 30 repeated processes.
IC ICM G01N030-48
ICS B01J013-00
ICA C09K003-00
CC 79-4 (Inorganic Analytical Chemistry)
IT 106-91-2D, reaction products with methacrylic acid-sodium styrenesulfonate copolymer 57833-28-0D, reaction products with glycidyl methacrylate
RL: ANST (Analytical study)
(as stationary phase for liquid chromatog.)
IT 106-91-2D, reaction products with methacrylic acid-sodium styrenesulfonate copolymer
RL: ANST (Analytical study)
(as stationary phase for liquid chromatog.)
RN 106-91-2 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)



L184 ANSWER 9 OF 10 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1978:426199 ZCAPLUS Full-text
DOCUMENT NUMBER: 89:26199
ORIGINAL REFERENCE NO.: 89:4061a,4064a
TITLE: Water-thinned coating compositions
INVENTOR(S): Nakayama, Yasuharu; Aihara, Tetsuo
PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53019349	A	19780222	JP 1976-94614	19760809
JP 61046504	B	19861014		

PRIORITY APPLN. INFO.: JP 1976-94614 A 19760809
AB Vinyl monomers were radical-polymerized in an emulsion containing water-soluble, curable resins as emulsifier and mixed with 0.1-150 phr drying or semidrying oil fatty acid esters to give water-thinned coating compns. For example, 1,2-polybutadiene (mol. weight 3000) was maleated, neutralized with 0.95 equiv NH3, mixed with 35 phr Bu Cellosolve, dissolved in water, mixed with 129 phr Bu methacrylate and 129 phr styrene, treated with 0.25 part (per 100 parts monomer) ammonium peroxide, and heated at 80° for 2 h to give a 40% solids emulsion (A). Safflower oil fatty acid-glycidyl methacrylate adduct 60, styrene 27, and acrylic acid 18 parts were polymerized in Bu Cellosolve to acid value 80 and mol. weight 7000, mixed with Co (as naphthenate) 0.16, Mn (as naphthenate) 0.16, and Pb (as naphthenate) 0.45 part, and neutralized with NH3. The neutralized composition (1 part as solid) was mixed with 0.9 part linseed oil fatty acid-glycidyl methacrylate adduct and 9 parts A to give a

composition with min. film-forming temperature 4°, forming a coating with good adhesion and good resistance to water and salt water.

IC C09D005-02

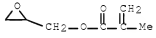
CC 42-10 (Coatings, Inks, and Related Products)

IT 79-10-7D, polymer with styrene and safflower oil fatty acid-glycidyl methacrylate ester 100-42-5D, polymer with safflower oil fatty-glycidyl methacrylate ester and acrylic acid 106-91-2D, esters with safflower oil fatty acid, polymer with styrene and acrylic acid
RL: USES (Uses)
(vinyl copolymer coatings containing)

IT 106-91-2D, esters with safflower oil fatty acid, polymer with styrene and acrylic acid
RL: USES (Uses)
(vinyl copolymer coatings containing)

RN 106-91-2 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)



L184 ANSWER 10 OF 10 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1978:122764 ZCAPLUS Full-text

DOCUMENT NUMBER: 88:122764

ORIGINAL REFERENCE NO.: 88:19277a,19280a

TITLE: Aqueous preparation for forming a film

INVENTOR(S): Nakayama, Yasuharu; Watanabe, Tadashi; Nishida, Reiziro; Enomoto, Satoru

PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan; Kureha Chemical Industry Co., Ltd.

SOURCE: Ger. Offen., 21 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

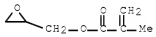
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2730251	A1	19780112	DE 1977-2730251	19770705
DE 2730251	C2	19821202		
JP 53005229	A	19780118	JP 1976-80273	19760705
US 4130529	A	19781219	US 1977-811559	19770630
FR 2357618	A1	19780203	FR 1977-20496	19770704
FR 2357618	B1	19790601		
GB 1562955	A	19800319	GB 1977-27999	19770704

PRIORITY APPLN. INFO.: JP 1976-80273 A 19760705

AB The temperature for formation of homogeneous films from aqueous compns. of vinyl polymers is lowered by addition of [CH2:CHCH:CHCH2CH(CH:CH2)CHMeO)2CHR (I, R = H, alkyl groups, or aryl groups) to the aqueous compns. Thus, 1,2-polybutadiene (mol. weight 3000) was reacted with maleic acid to give a product with acid number 100, which was neutralized with 0.95 equivalent aqueous NH4OH, next with 35 parts Bu Cellosolve/100 parts product, dissolved

in water, and polymerized 2 h at 80° with 259 parts Bu methacrylate (II)/100 parts product in the presence of 0.25 parts ammonium peroxide/100 parts II to give 40g solids aqueous copolymer (III) [65992-61-2] emulsion. This emulsion was mixed with 5 parts I (R = Me) (IV) [61877-88-1]/100 parts III to give an emulsion that could form a coating at <-10°; the coatings had 20% gel after 1 day drying at 20°, and after drying 7 days at 20°, the coating had hardness F, Erichsen test value 8 mm, cross-hatch test value 100/100, and Du Pont impact strength test value 50 cm and whitened after 60 min immersion in gasoline. A similar coating not containing IV exhibited film-forming temperature -5° and contained 10% gel after drying 1 day at 20°; after drying 7 days at 20°, the coating had hardness F, Erichsen test value 6 mm, cross-hatch test value 100/100, and Du Pont impact strength test value 35 cm and whitened after 5 min immersion in gasoline.

IC C08F291-00
CC 42-7 (Coatings, Inks, and Related Products)
IT 79-10-7D, polymers with styrene and safflower oil fatty acid derivs. of glycidyl methacrylate, ammonium salts 100-42-5D, polymers with acrylic acid and safflower oil fatty acid derivs. of glycidyl methacrylate, ammonium salts 106-91-2D, safflower oil fatty acid derivs., polymers with acrylic acid and styrene, ammonium salts
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, water-thinned, film-formation temperature of, additives for lowering of)
IT 106-91-2D, safflower oil fatty acid derivs., polymers with acrylic acid and styrene, ammonium salts
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, water-thinned, film-formation temperature of, additives for lowering of)
RN 106-91-2 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester (CA INDEX NAME)



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L3              2 SEA SPE=ON  ABB=ON  PLU=ON  US2006-579066/AP
                D SCA
L4            279 SEA SPE=ON  ABB=ON  PLU=ON  KAMIJO M?/AU
L5           1553 SEA SPE=ON  ABB=ON  PLU=ON  ONISHI M?/AU
L6            174 SEA SPE=ON  ABB=ON  PLU=ON  MUROFUSHI K?/AU
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                  -8/BI OR 852316-43-9/BI OR 852316-44-0/BI)
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                SAVE TEMP L11 BER066STR9L/A
L12             6 SEA SPE=ON  ABB=ON  PLU=ON  L11 AND L8
                D SCA

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                  6/RN OR 852316-41-7/RN)
L15        124350 SEA SPE=ON  ABB=ON  PLU=ON  (5919-74-4/CRN OR 79-41-4/CRN OR
                  251298-12-1/CRN OR 42248-78-2/CRN OR 622-97-9/CRN OR 15625-89-5
                  /CRN OR 25086-15-1/CRN OR 80-62-6/CRN OR 852316-39-3/CRN OR
                  852316-40-6/CRN OR 852316-41-7/CRN)
L16             5 SEA SPE=ON  ABB=ON  PLU=ON  L14 AND L11
L17         12070 SEA SPE=ON  ABB=ON  PLU=ON  L15 AND L11
                D SCA L16
                D SCA L12
                D SCA L16
                SEL RN L16
L18          2724 SEA SPE=ON  ABB=ON  PLU=ON  (251298-12-1/CRN OR 5919-74-4/CRN
                  OR 852316-39-3/CRN OR 852316-40-6/CRN OR 852316-41-7/CRN)
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     FILE 'STNGUIDE' ENTERED AT 09:32:46 ON 01 APR 2009

     FILE 'REGISTRY' ENTERED AT 09:34:16 ON 01 APR 2009
L19                STRUCTURE UPLOADED
L20                STRUCTURE UPLOADED
L21                STRUCTURE UPLOADED
L22            50 SEA SUB=L11 SSS SAM L21
                   D STAT QUE
                   D STAT QUE
L23                SCREEN 2068
L24            21 SEA SUB=L11 SSS SAM (L21 AND L23)
                   D SCA
L25           408 SEA SUB=L11 SSS FUL (L21 AND L23)
L26            98 SEA SPE=ON  ABB=ON  PLU=ON  L25 AND 1/NC
L*** DEL       12 S L26 AND RELATED POLYMERS/FA
L*** DEL     ANALYZE L*** 1- RN LNK$ :      25 TERMS
L*** DEL       25 S L***
L27           111 POLYLINK L26
L28            13 SEA SPE=ON  ABB=ON  PLU=ON  L27 NOT L26
                   D SCA
                   D SCA L12
L29             1 SEA SPE=ON  ABB=ON  PLU=ON  METHACRYLIC ACID/CN
                   D SCA
                   SEL RN
L30         53228 SEA SPE=ON  ABB=ON  PLU=ON  79-41-4/CRN
L31            48 SEA SPE=ON  ABB=ON  PLU=ON  L30 AND L25
L32          4117 SEA SPE=ON  ABB=ON  PLU=ON  L30 AND L11
L33          2460 SEA SPE=ON  ABB=ON  PLU=ON  L32 AND C6/ES
L34             1 SEA SPE=ON  ABB=ON  PLU=ON  STYRENE/CN
                   SEL RN
L35         81483 SEA SPE=ON  ABB=ON  PLU=ON  100-42-5/CRN
L36          1556 SEA SPE=ON  ABB=ON  PLU=ON  L32 AND L35
L37             0 SEA SPE=ON  ABB=ON  PLU=ON  L36 AND L12
L38          1556 SEA SPE=ON  ABB=ON  PLU=ON  L11 AND L30 AND L35
L39             0 SEA SPE=ON  ABB=ON  PLU=ON  L8 AND L30 AND L35
                   D IDE L12 1-6
L40             5 SEA SPE=ON  ABB=ON  PLU=ON  42248-78-2/CRN
                   D SCA
L41             4 SEA SPE=ON  ABB=ON  PLU=ON  L40 AND L11

     FILE 'ZCAPLUS' ENTERED AT 10:36:37 ON 01 APR 2009
L42             3 SEA SPE=ON  ABB=ON  PLU=ON  L41

     FILE 'REGISTRY' ENTERED AT 10:37:42 ON 01 APR 2009
L43          1373 SEA SPE=ON  ABB=ON  PLU=ON  622-97-9/CRN
L44         53228 SEA SPE=ON  ABB=ON  PLU=ON  79-41-4/CRN
L45             4 SEA SPE=ON  ABB=ON  PLU=ON  L41 AND L43
L46             4 SEA SPE=ON  ABB=ON  PLU=ON  L41 AND L44
L*** DEL       72 S L43 (L) L44
L*** DEL       72 S L43 (S) L44
L*** DEL       72 S L43 (P) L44
L47            72 SEA SPE=ON  ABB=ON  PLU=ON  L43 AND L44
L48            11 SEA SPE=ON  ABB=ON  PLU=ON  L47 AND  L11
L49             7 SEA SPE=ON  ABB=ON  PLU=ON  L48 NOT L41
L50             7 SEA SPE=ON  ABB=ON  PLU=ON  L49 NOT L12
L51             2 SEA SPE=ON  ABB=ON  PLU=ON  L12 NOT L48
                   D SCA
L52             4 SEA SPE=ON  ABB=ON  PLU=ON  L12 AND L48
                   D SCA
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     FILE 'ZCAPLUS' ENTERED AT 10:43:35 ON 01 APR 2009
L53             7 SEA SPE=ON  ABB=ON  PLU=ON  L48
                  D SCA

     FILE 'REGISTRY' ENTERED AT 10:46:41 ON 01 APR 2009
L54            72 SEA SPE=ON  ABB=ON  PLU=ON  L43 AND L44
L*** DEL       11 S L54 AND L11
                  D RN L34
L55         81483 SEA SPE=ON  ABB=ON  PLU=ON  100-42-5/CRN
L56         14838 SEA SPE=ON  ABB=ON  PLU=ON  L55 AND L44
L57          1556 SEA SPE=ON  ABB=ON  PLU=ON  L56 AND L11
L58            17 SEA SPE=ON  ABB=ON  PLU=ON  L56 AND 2/NC
                  D SCA
L*** DEL        0 S L58 AND 1/NC
L*** DEL        0 S L57 AND 1/NC
                  SEL RN L58
L59            88 SEA SPE=ON  ABB=ON  PLU=ON  (114672-18-3/CRN OR 124916-37-6/CRN
                   OR 146166-74-7/CRN OR 146640-95-1/CRN OR 154801-40-8/CRN OR
                  37341-83-6/CRN OR 449760-01-4/CRN OR 476615-89-1/CRN OR
                  497955-73-4/CRN OR 56619-44-4/CRN OR 737791-65-0/CRN OR
                  755001-01-5/CRN OR 80123-03-1/CRN OR 828914-00-7/CRN OR
                  856646-54-3/CRN OR 9010-92-8/CRN OR 97287-46-2/CRN)
L60             1 SEA SPE=ON  ABB=ON  PLU=ON  L59 AND L11
                  D SCA
L61             1 SEA SPE=ON  ABB=ON  PLU=ON  L60 NOT (L52 OR L12)

     FILE 'ZCAPLUS' ENTERED AT 10:53:03 ON 01 APR 2009
L62             6 SEA SPE=ON  ABB=ON  PLU=ON  L60
                  D SCA

     FILE 'REGISTRY' ENTERED AT 10:54:27 ON 01 APR 2009
L63             1 SEA SPE=ON  ABB=ON  PLU=ON  L47 AND 2/NC
                  D SCA
                  SEL RN
L64             5 SEA SPE=ON  ABB=ON  PLU=ON  42248-78-2/CRN
L65             4 SEA SPE=ON  ABB=ON  PLU=ON  L64 AND L11
L66             0 SEA SPE=ON  ABB=ON  PLU=ON  L65 NOT L52
L67            11 SEA SPE=ON  ABB=ON  PLU=ON  L47 AND 3/NC
L68            10 SEA SPE=ON  ABB=ON  PLU=ON  L67 NOT L65
L69             0 SEA SPE=ON  ABB=ON  PLU=ON  L68 AND L11
L70             0 SEA SPE=ON  ABB=ON  PLU=ON  L57 AND 1/NC
L71             0 SEA SPE=ON  ABB=ON  PLU=ON  L57 AND 2/NC
L72             7 SEA SPE=ON  ABB=ON  PLU=ON  L57 AND 3/NC
                  D SCA

     FILE 'ZCAPLUS' ENTERED AT 10:58:50 ON 01 APR 2009
L73            54 SEA SPE=ON  ABB=ON  PLU=ON  L72
L74                ANALYZE PLU=ON  L73 1- RN HIT :       7 TERMS
                   D

     FILE 'REGISTRY' ENTERED AT 11:04:01 ON 01 APR 2009
L75             1 SEA SPE=ON  ABB=ON  PLU=ON  58353-15-4
                  D SCA
L76             1 SEA SPE=ON  ABB=ON  PLU=ON  117431-80-8
                  D SCA
L77             1 SEA SPE=ON  ABB=ON  PLU=ON  119419-05-5
                  D SCA

     FILE 'ZCAPLUS' ENTERED AT 11:06:42 ON 01 APR 2009
                  SEL L74 4-7
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     FILE 'REGISTRY' ENTERED AT 11:07:08 ON 01 APR 2009
L78             4 SEA SPE=ON  ABB=ON  PLU=ON  (201614-97-3/RN OR 643758-48-9/RN
                  OR 1126426-14-9/RN OR 173239-37-7/RN)
                  D SCA
L79             1 SEA SPE=ON  ABB=ON  PLU=ON  L78 AND 11/C
                  D SCA
                  D SCA L72
L80             6 SEA SPE=ON  ABB=ON  PLU=ON  L72 NOT L79
                  D SCA
L81             1 SEA SPE=ON  ABB=ON  PLU=ON  "(C8 H8 . C4 H6 O2)X . X C7 H12
                  O4"/MF
L82             1 SEA SPE=ON  ABB=ON  PLU=ON  L80 AND GRAFT/CNS
L83             3 SEA SPE=ON  ABB=ON  PLU=ON  L79 OR L81 OR L82
                  D SCA

     FILE 'ZCAPLUS' ENTERED AT 11:15:52 ON 01 APR 2009
L84            14 SEA SPE=ON  ABB=ON  PLU=ON  L83

     FILE 'REGISTRY' ENTERED AT 12:32:43 ON 01 APR 2009
L85            29 SEA SPE=ON  ABB=ON  PLU=ON  L27 AND C6/ES
                  D SCA

     FILE 'STNGUIDE' ENTERED AT 12:36:26 ON 01 APR 2009

     FILE 'REGISTRY' ENTERED AT 12:38:32 ON 01 APR 2009
L86               STRUCTURE UPLOADED

     FILE 'REGISTRY' ENTERED AT 12:42:49 ON 01 APR 2009

     FILE 'STNGUIDE' ENTERED AT 12:42:50 ON 01 APR 2009

     FILE 'REGISTRY' ENTERED AT 12:46:38 ON 01 APR 2009
                  D L86
L87               STRUCTURE UPLOADED
L88            19 SEA SUB=L11 SSS SAM L86 AND L87
L89             4 SEA SUB=L11 SSS SAM (L86 AND L87) AND L23
L90            69 SEA SUB=L11 SSS FUL (L86 AND L87) AND L23
                  D SCA
L91               STRUCTURE UPLOADED
L92               STRUCTURE UPLOADED
L93             4 SEA SUB=L11 SSS SAM L91 AND L92
                  D SCA
L94            58 SEA SUB=L11 SSS FUL L91 AND L92
L95             6 SEA SPE=ON  ABB=ON  PLU=ON  L94 AND S/ELS
                  D SCA
                  D SCA
L96             4 SEA SPE=ON  ABB=ON  PLU=ON  L95 NOT BR/ELS

     FILE 'ZCAPLUS' ENTERED AT 13:17:02 ON 01 APR 2009
L97             4 SEA SPE=ON  ABB=ON  PLU=ON  L96

     FILE 'REGISTRY' ENTERED AT 13:18:15 ON 01 APR 2009
L98            52 SEA SPE=ON  ABB=ON  PLU=ON  L94 NOT L95
L99             6 SEA SPE=ON  ABB=ON  PLU=ON  L98 AND 2/NC
                  D SCA
L100            3 SEA SPE=ON  ABB=ON  PLU=ON  L99 NOT N/ELS
                  D SCA

     FILE 'ZCAPLUS' ENTERED AT 13:20:35 ON 01 APR 2009
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L101          4 SEA SPE=ON  ABB=ON  PLU=ON  L100
                D SCA
L102         25 SEA SPE=ON  ABB=ON  PLU=ON  L13 OR L42 OR L53 OR L62 OR L84 OR
                L77 OR L101

     FILE 'REGISTRY' ENTERED AT 13:24:51 ON 01 APR 2009
L103      82455 SEA SPE=ON  ABB=ON  PLU=ON  L35 OR L43
L104          1 SEA SPE=ON  ABB=ON  PLU=ON  ACRYLIC ACID/CN
                SEL RN
L105      68590 SEA SPE=ON  ABB=ON  PLU=ON  79-10-7/CRN
L106     115767 SEA SPE=ON  ABB=ON  PLU=ON  L30 OR L105
L*** DEL  68590 S L105 AND L106
L*** DEL   3998 S L107 AND 2/NC
L107      27929 SEA SPE=ON  ABB=ON  PLU=ON  L103 AND L106
L108         32 SEA SPE=ON  ABB=ON  PLU=ON  L107 AND 2/NC
L109       2773 SEA SPE=ON  ABB=ON  PLU=ON  L107 AND L11
L110        187 SEA SPE=ON  ABB=ON  PLU=ON  L109 AND S/ELS
                SEL RN L108
L111        221 SEA SPE=ON  ABB=ON  PLU=ON  (110100-95-3/CRN OR 114672-18-3/CRN
                 OR 120293-17-6/CRN OR 124916-37-6/CRN OR 132010-67-4/CRN OR
                146166-74-7/CRN OR 146640-95-1/CRN OR 148021-85-6/CRN OR
                154801-40-8/CRN OR 25085-34-1/CRN OR 37341-83-6/CRN OR
                42248-78-2/CRN OR 449760-01-4/CRN OR 476615-89-1/CRN OR
                478361-55-6/CRN OR 497955-73-4/CRN OR 51852-76-7/CRN OR
                56619-44-4/CRN OR 609771-10-0/CRN OR 709024-68-0/CRN OR
                72108-82-8/CRN OR 737791-65-0/CRN OR 755001-01-5/CRN OR
                784182-77-0/CRN OR 80123-03-1/CRN OR 828914-00-7/CRN OR
                856646-54-3/CRN OR 856646-65-6/CRN OR 883883-97-4/CRN OR
                9010-92-8/CRN OR 934472-62-5/CRN OR 97287-46-2/CRN)
L112         11 SEA SPE=ON  ABB=ON  PLU=ON  L111 AND L11

     FILE 'ZCAPLUS' ENTERED AT 13:31:16 ON 01 APR 2009
L113         14 SEA SPE=ON  ABB=ON  PLU=ON  L112
L114         30 SEA SPE=ON  ABB=ON  PLU=ON  L102 OR L113
L115         34 SEA SPE=ON  ABB=ON  PLU=ON  L97 OR L114

     FILE 'REGISTRY' ENTERED AT 13:32:52 ON 01 APR 2009
                D SCA L112
L116            STRUCTURE UPLOADED
L117            STRUCTURE UPLOADED
L118         50 SEA SUB=L11 SSS SAM L92 AND L116 AND L117
L119       2895 SEA SUB=L11 SSS FUL L92 AND L116 AND L117
L120        489 SEA SPE=ON  ABB=ON  PLU=ON  L119 AND GRAFT?/CNS
L121        124 SEA SPE=ON  ABB=ON  PLU=ON  L120 AND S/ELS
L122          0 SEA SPE=ON  ABB=ON  PLU=ON  L121 AND NC<5
L123          1 SEA SPE=ON  ABB=ON  PLU=ON  L121 AND NC<6
                D SCA
L124            STRUCTURE UPLOADED
L125         50 SEA SUB=L11 SSS SAM L124
L126       1392 SEA SUB=L11 SSS FUL L124
L127         65 SEA SPE=ON  ABB=ON  PLU=ON  L126 AND L119
L128            STRUCTURE UPLOADED
L129         37 SEA SUB=L11 SSS SAM L128
L130        821 SEA SUB=L11 SSS FUL L128
L131         26 SEA SPE=ON  ABB=ON  PLU=ON  L130 AND L119

     FILE 'ZCAPLUS' ENTERED AT 13:58:26 ON 01 APR 2009
L132         12 SEA SPE=ON  ABB=ON  PLU=ON  L131
                D SCA
L133     651886 SEA SPE=ON  ABB=ON  PLU=ON  ?FILTER?/BI
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L134     827768 SEA SPE=ON  ABB=ON  PLU=ON  COLOR?/BI
L135          2 SEA SPE=ON  ABB=ON  PLU=ON  L132 AND L133
L136          2 SEA SPE=ON  ABB=ON  PLU=ON  L132 AND L134
                D SCA
L137          3 SEA SPE=ON  ABB=ON  PLU=ON  (L135 OR L136)
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 14:01:50 ON 01 APR 2009
L138          3 SEA SPE=ON  ABB=ON  PLU=ON  (104089-07-8/BI OR 1047660-02-5/BI
                OR 73329-62-1/BI)
                D SCA
L139         35 SEA SPE=ON  ABB=ON  PLU=ON  L119 AND NC<4
L140         34 SEA SPE=ON  ABB=ON  PLU=ON  L139 NOT L12
L141          0 SEA SPE=ON  ABB=ON  PLU=ON  L140 AND 2/NC
L142         34 SEA SPE=ON  ABB=ON  PLU=ON  L140 AND 3/NC
L143          3 SEA SPE=ON  ABB=ON  PLU=ON  L111 AND L142
                D SCA

     FILE 'ZCAPLUS' ENTERED AT 14:07:49 ON 01 APR 2009
L144         10 SEA SPE=ON  ABB=ON  PLU=ON  L143

     FILE 'REGISTRY' ENTERED AT 14:08:19 ON 01 APR 2009
L145         31 SEA SPE=ON  ABB=ON  PLU=ON  L140 AND ESTER?/CNS
L146          3 SEA SPE=ON  ABB=ON  PLU=ON  L139 AND GRAFT?/CNS
L147          3 SEA SPE=ON  ABB=ON  PLU=ON  L146 NOT L143
                D SCA

     FILE 'ZCAPLUS' ENTERED AT 14:10:15 ON 01 APR 2009
L148          8 SEA SPE=ON  ABB=ON  PLU=ON  L146
L149         39 SEA SPE=ON  ABB=ON  PLU=ON  L13 OR L42 OR L53 OR L62 OR L84 OR
                L97 OR L101 OR L113 OR L135 OR L136 OR L144 OR L148
L150          6 SEA SPE=ON  ABB=ON  PLU=ON  L149 AND L133
L151          7 SEA SPE=ON  ABB=ON  PLU=ON  L149 AND L134
L152        473 SEA SPE=ON  ABB=ON  PLU=ON  L130
L153      24646 SEA SPE=ON  ABB=ON  PLU=ON  OPTICAL FILTER?/BI
L154         11 SEA SPE=ON  ABB=ON  PLU=ON  L152 AND L153
L155      18399 SEA SPE=ON  ABB=ON  PLU=ON  COLOR FILTER?/BI
L156         13 SEA SPE=ON  ABB=ON  PLU=ON  L152 AND L155
L157         14 SEA SPE=ON  ABB=ON  PLU=ON  L154 OR L156
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 14:17:05 ON 01 APR 2009
L158         26 SEA SPE=ON  ABB=ON  PLU=ON  (112955-56-3/BI OR 160274-36-2/BI
                OR 582318-63-6/BI OR 582318-65-8/BI OR 96595-56-1/BI OR
                1016969-45-1/BI OR 1016969-74-6/BI OR 1016969-75-7/BI OR
                1036847-96-7/BI OR 1047660-02-5/BI OR 1055909-41-5/BI OR
                1071227-64-9/BI OR 295327-16-1/BI OR 295327-18-3/BI OR
                296240-95-4/BI OR 296240-98-7/BI OR 296241-01-5/BI OR 296241-04
                -8/BI OR 296241-06-0/BI OR 296241-09-3/BI OR 521307-49-3/BI OR
                582318-68-1/BI OR 582320-61-4/BI OR 582320-64-7/BI OR 582320-67
                -0/BI OR 591767-68-9/BI)

     FILE 'ZCAPLUS' ENTERED AT 14:19:01 ON 01 APR 2009
L159          1 SEA SPE=ON  ABB=ON  PLU=ON  L157 AND L149
                D SCA

     FILE 'REGISTRY' ENTERED AT 14:20:34 ON 01 APR 2009
L160         61 SEA SPE=ON  ABB=ON  PLU=ON  L11 AND 1/NC AND OC2/ES
L161       1353 SEA SPE=ON  ABB=ON  PLU=ON  L11 AND 2/NC AND OC2/ES
L162         44 SEA SPE=ON  ABB=ON  PLU=ON  L160 NOT PMS/CI
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     FILE 'ZCAPLUS' ENTERED AT 14:23:39 ON 01 APR 2009
L163       3202 SEA SPE=ON  ABB=ON  PLU=ON  L162/D
L164       1607 SEA SPE=ON  ABB=ON  PLU=ON  L163 (7W) ?REACT?/BI
L165        298 SEA SPE=ON  ABB=ON  PLU=ON  L163 (15W) ?STYREN?/BI
L166       2608 SEA SPE=ON  ABB=ON  PLU=ON  L163 (15W) (?ACRYL?/BI)
L167        110 SEA SPE=ON  ABB=ON  PLU=ON  L164 AND L165 AND L166
L168     109930 SEA SPE=ON  ABB=ON  PLU=ON  ?ACRYL?/BI (2A) ?STYREN?/BI
L169         77 SEA SPE=ON  ABB=ON  PLU=ON  L168 AND L167
L170     207965 SEA SPE=ON  ABB=ON  PLU=ON  ?ACRYLIC ACID?/BI
L171      21408 SEA SPE=ON  ABB=ON  PLU=ON  L170 (2A) ?STYREN?/BI
L172         74 SEA SPE=ON  ABB=ON  PLU=ON  L171 AND L164
L173         11 SEA SPE=ON  ABB=ON  PLU=ON  L163 (8W) L171
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 14:33:09 ON 01 APR 2009
L174          2 SEA SPE=ON  ABB=ON  PLU=ON  (106-91-2/BI OR 106-90-1/BI)
                D SCA

     FILE 'ZCAPLUS' ENTERED AT 14:34:48 ON 01 APR 2009
                D COST
L175          2 SEA SPE=ON  ABB=ON  PLU=ON  L4 AND L5 AND L6
L176         16 SEA SPE=ON  ABB=ON  PLU=ON  L11 AND (L4 OR L5 OR L6)
                D SCA
L177          5 SEA SPE=ON  ABB=ON  PLU=ON  L176 AND (L153 OR L155)
L178          5 SEA SPE=ON  ABB=ON  PLU=ON  L176 AND (L134 OR L135)

     FILE 'REGISTRY' ENTERED AT 14:39:16 ON 01 APR 2009

     FILE 'ZCAPLUS' ENTERED AT 14:39:18 ON 01 APR 2009
                D STAT QUE L176
                D STAT QUE L177
                D STAT QUE L178
L179         16 SEA SPE=ON  ABB=ON  PLU=ON  (L176 OR L177 OR L178)
                D IBIB ABS HITIND HITSTR L179 1-16

     FILE 'REGISTRY' ENTERED AT 14:40:23 ON 01 APR 2009

     FILE 'ZCAPLUS' ENTERED AT 14:40:26 ON 01 APR 2009
                D STAT QUE L13
                D STAT QUE L42
                D STAT QUE L53
                D STAT QUE L62
                D STAT QUE L84
                D STAT QUE L97
                D STAT QUE L101
                D STAT QUE L113
                D STAT QUE L135
                D STAT QUE L136
                D STAT QUE L144
                D STAT QUE L148
                D STAT QUE L150
                D STAT QUE L151
                D STAT QUE L159
L180         35 SEA SPE=ON  ABB=ON  PLU=ON  (L13 OR L42 OR L53 OR L62 OR L84
                OR L97 OR L101 OR L113 OR L135 OR L136 OR L144 OR L148 OR L150
                OR L151 OR L159) NOT L179
                D IBIB ABS HITIND HITSTR L180 1-35

     FILE 'REGISTRY' ENTERED AT 14:43:23 ON 01 APR 2009
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     FILE 'ZCAPLUS' ENTERED AT 14:43:26 ON 01 APR 2009
                D STAT QUE L157
L181         13 SEA SPE=ON  ABB=ON  PLU=ON  L157 NOT (L179 OR L180)
                D IBIB ABS HITIND HITSTR L181 1-13

     FILE 'REGISTRY' ENTERED AT 14:44:29 ON 01 APR 2009

     FILE 'ZCAPLUS' ENTERED AT 14:44:31 ON 01 APR 2009
                D STAT QUE L173
L182          1 SEA SPE=ON  ABB=ON  PLU=ON  L173 AND CATALY?/BI
L183         11 SEA SPE=ON  ABB=ON  PLU=ON  L173 OR L182
L184         10 SEA SPE=ON  ABB=ON  PLU=ON  L183 NOT (L179 OR L57 OR L180)
                D IBIB ABS HITIND HITSTR L184 1-10


     FILE HOME

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
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     STRUCTURE FILE UPDATES:   30 MAR 2009  HIGHEST RN 1129871-47-1
     DICTIONARY FILE UPDATES:  30 MAR 2009  HIGHEST RN 1129871-47-1

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     FILE LAST UPDATED: 31 Mar 2009  (20090331/ED)

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     LAST RELOADED: Mar 27, 2009 (20090327/UP).
Uploading L9.str
```
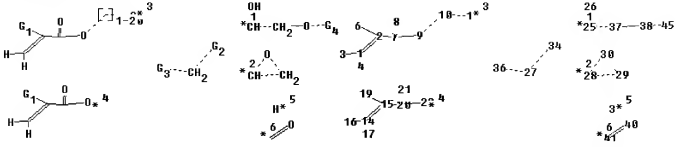
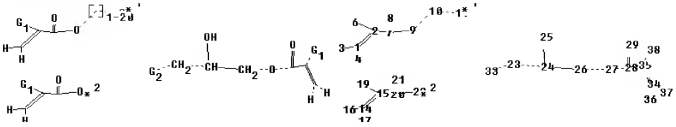
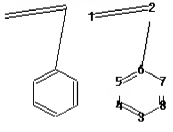



```
chain nodes :
1  2  3  4  6  7  8  14  15  16  17  19  20  21  25  26  27  34  36  37  38  39
40  41  45
ring nodes :
28  29  30
ring/chain nodes :
9  10  11  22
chain bonds :
1-2  1-3  1-4  2-6  2-7  7-8  7-9  14-15  14-16  14-17  15-19  15-20  20-21  20-22
25-26  25-37  27-34  27-36  37-38  38-45  40-41
ring/chain bonds :
9-10  10-11
ring bonds :
28-30  28-29  29-30
exact/norm bonds :
2-6  7-8  7-9  9-10  10-11  15-19  20-21  20-22  25-26  25-37  27-34  27-36  28-30
28-29  29-30  38-45  40-41
exact bonds :
1-2  1-3  1-4  2-7  14-15  14-16  14-17  15-20  37-38


G1:H,CH3

G2:[*1],[*2]

G3:[*3],[*4]

G4:[*5],[*6]

Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS  10:CLASS
11:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS  19:CLASS  20:CLASS  21:CLASS
22:CLASS  25:CLASS
26:CLASS  27:CLASS  28:Atom  29:Atom  30:Atom  34:CLASS  36:CLASS  37:CLASS
38:CLASS  39:CLASS
40:CLASS  41:CLASS  45:CLASS



Uploading L91.str
```

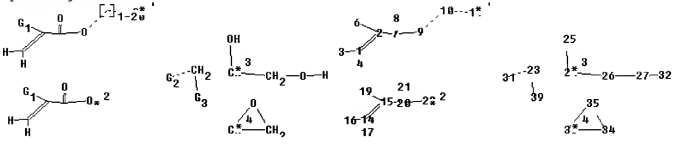


```
chain nodes :
1  2  3  4  6  7  8  14  15  16  17  19  20  21  22  23  24  25  26  27  28  29
33  34  35  36  37  38
ring/chain nodes :
9  10  11
chain bonds :
1-2  1-3  1-4  2-6  2-7  7-8  7-9  14-15  14-16  14-17  15-19  15-20  20-21  20-22
23-24  23-33  24-25  24-26  26-27  27-28  28-29  28-35  34-35  34-36  34-37  35-38
ring/chain bonds :
9-10  10-11
exact/norm bonds :
2-6  7-8  7-9  9-10  10-11  15-19  20-21  20-22  23-24  23-33  26-27  27-28  28-29
34-36  34-37  35-38
exact bonds :
1-2  1-3  1-4  2-7  14-15  14-16  14-17  15-20  24-25  24-26  28-35  34-35


G1:H,CH3

G2:[*1],[*2]

Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS  10:CLASS
11:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS  19:CLASS  20:CLASS  21:CLASS
22:CLASS  23:CLASS
24:CLASS  25:CLASS  26:CLASS  27:CLASS  28:CLASS  29:CLASS  33:CLASS  34:CLASS
35:CLASS  36:CLASS
37:CLASS  38:CLASS



Uploading L92.str
```



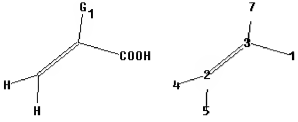
```
chain nodes :
1  2
ring nodes :
3  4  5  6  7  8
chain bonds :
1-2  2-6
ring bonds :
3-4  3-8  4-5  5-6  6-7  7-8
```

```
exact bonds :
1-2  2-6
normalized bonds :
3-4  3-8  4-5  5-6  6-7  7-8
isolated ring systems :
containing 3 :


Match level :
1:CLASS  2:CLASS  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom



Uploading L116.str
```



```
chain nodes :
1  2  3  4  6  7  8  14  15  16  17  19  20  21  22  23  24  25  26  27  31  32
39
ring nodes :
33  34  35
ring/chain nodes :
9  10  11
chain bonds :
1-2  1-3  1-4  2-6  2-7  7-8  7-9  14-15  14-16  14-17  15-19  15-20  20-21  20-22
23-31  23-39  24-26  24-25  26-27  27-32
ring/chain bonds :
9-10  10-11
ring bonds :
33-34  33-35  34-35
exact/norm bonds :
2-6  7-8  7-9  9-10  10-11  15-19  20-21  20-22  23-31  23-39  33-34  33-35  34-35

exact bonds :
1-2  1-3  1-4  2-7  14-15  14-16  14-17  15-20  24-26  24-25  26-27  27-32


G1:H,CH3

G2:[*1],[*2]

G3:[*3],[*4]

Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS  10:CLASS
11:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS  19:CLASS  20:CLASS  21:CLASS
22:CLASS  23:CLASS
24:CLASS  25:CLASS  26:CLASS  27:CLASS  31:CLASS  32:CLASS  33:Atom  34:Atom
35:Atom  39:CLASS
```

Uploading L117.str

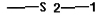


chain nodes :
1 2 3 4 5 7
chain bonds :
1-3 2-3 2-4 2-5 3-7
exact/norm bonds :
3-7
exact bonds :
1-3 2-3 2-4 2-5

G1:CH3,H

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS

Uploading L128.str



chain nodes :
1
ring/chain nodes :
2
chain bonds :
1-2
exact bonds :
1-2

Hydrogen count :
1:= exact 1
Connectivity :
1:1 E exact RC ring/chain
Match level :
1:CLASS 2:CLASS

=>